WEATHER MAPS,

PUBLISHED AT SYDNEY,

NEW SOUTH WALES,

1885.

H. C. RUSSELL, B.A.,

GOVERNMENT ASTRONOMER.

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METEOROLOGY.

JAN 1 188 5

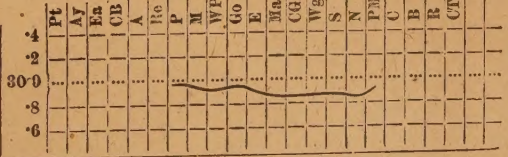
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to December 31 44·040
Barometers corrected to 32° Fal and Mean Sea Level

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
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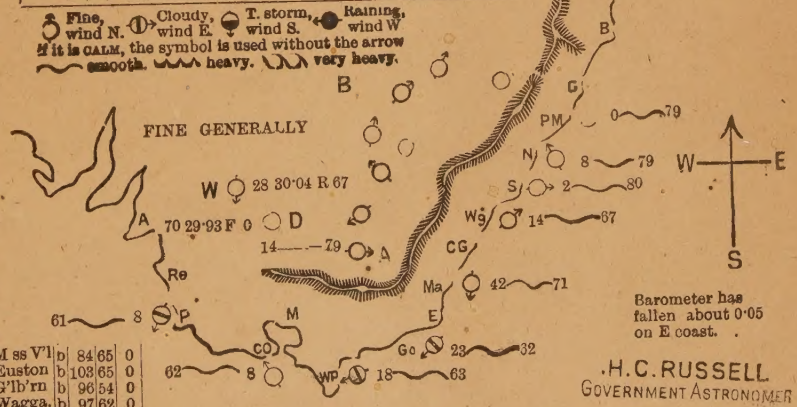

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has fallen about 0·05 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R in
Casino ...	–	—	—	—
T'nt'rfield	b	93	55	0
Clarence .	–	—	—	—
Moree....	b	98	71	0
Grafton ..	–	—	—	—
Gl'n Inn's	b	87	54	0
Inverell ..	–	—	—	—
Bourke ..	–	—	—	—
Narrabri	b	104	60	0
Armidalc	b	76	68	0
B'ndem'r.	b	84	49	0
Gunned'h	b	96	69	0
C'namble	b	—	—	0
Lismore ..	–	—	—	—
Walcha ..	b	80	51	0
Tamw'rth	b	88	58	0
Coonab'n	b	96	54	0
P.M'cqrie	b	86	63	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	83	62	0
Taree....	–	—	—	—
Cassilis ..	b	89	65	0
M'ss'lbr'k	–	—	—	—
Dubbo. ..	b	99	60	0
Menindie.	c	105	72	0
Singleton	b	90	66	0
N'ls'n sB		—	—	—
Mudg	b	91	52	0
Maitland.	–	—	—	—
Hill End .	b	—	—	0
N'wcastle	b	83	66	0
Orange ..	–	—	—	—
Bathurst	–	—	—	—
Forbes. ..	b	87	57	0
M.V'ct'ria	b	—	65	0
Carcoar ..	b	84	63	0
Cond'b'l'n	b	88	68	0
Marsdens	b	98	73	0
Picton. ..	b	93	57	0
Sydney ..	b	82	67	0
Wentw'th	c	97	67	0
Young. ..	b	98	56	0
Woll'g'ng	b	86	73	0
Taralga ..	b	90	47	0
Hay	–	—	—	..

Stations.	wt	M'x	Mn	R in
Queanbey'n	b	92	65	0
Deniliquin .	b	108	48	0
Moruya....	c	85	62	0
Kiandra...	c	86	43	0
Albury	b	103	66	0
Bodalla....	g	92	61	0
Cooma	c	95	51	0
Eden.....	–	—	—	—

M ss V'l	b	84	65	0
Euston	b	103	65	0
G'lb'rn	b	96	54	0
Wagga.	b	97	62	0
C. Geo.	–	—	—	–

METEOROLOGY.

9 A.M. JAN 2 1885

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Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
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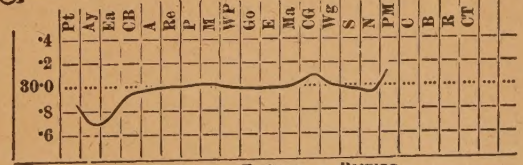
Total Rainfall from Jan. 1st to December 31 44·040
Barometers corrected to 32° Fal and Mean Sea Level

Stations.	wt	m'x	MD	R in
Casino ...	b	100	66	0
T'nt'rfield	b	96	53	0
Clarence .	–	—	—	—
Moree....	–	—	—	—
Grafton..	–	—	—	—
Gl'n Inn's	–	—	—	—
Inverell..	–	—	—	—
Bourke ..	c	117	81	0
Narrabri	u	106	71	0
Armidale	–	—	—	—
B'ndem'r.	–	—	—	—
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	–	—	—	—
Walcha ..	g	88	52	0
Tamw'rth	–	—	—	—
Coonab'n	q	101	63	0·51
P.M'cqrie	c	87	69	0
W'lcannia	–	—	—	—
M'rr'r'ndi	g	96	73	0
Taree....	c	92	68	0
Cassilis ..	u	95	75	0
M'ss'lbr'k	g	108	75	0
Dubbo. ...	b	108	75	0
Menindie.	b	93	70	0
Singleton	g	100	77	0
N'ls'n sB	g	89	69	0·13
Mudg	b	103	67	0
Maitland.	u	98	74	0
Hill End.	p	—	—	0·13
N'wcastle	g	83	70	0
Orange ..	c	92	62	0·07
Bathurst	c	99	61	0·13
Forbes. ..	b	106	72	0
M.V'ct'ria	c	–	61	0·27
Carcoar..	–	—	—	—
Cond'b'l'n	b	81	63	0
Marsdens	b	102	76	0
Picton. ..	u	98	66	0·21
Sydney ..	g	85	66	0·11
Wentw'th	b	90	60	0
Young. ..	u	100	63	0·87
Woll'g'ng	c	89	77	0·15
Taralga..	b	91	48	0
Hay	b	92	61	0

Stations.	wt	m'x	MD	R'in
Qeaunbey'n	b	96	61	0
Deniliquin .	b	92	46	0
Moruya....	g	77	59	0·07
Kiandra...	b	84	48	0
Albury	–	—	—	—
Bodalla....	g	81	57	0·31
Cooma	c	97	50	0
Eden.....	u	79	60	0

AS 23 30·02 F 95 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

'85 29·83— 28 B

CLOUDY GENERALLY

W 28 30·08 R 75

77 8 A 68 29·96R 0 D

18 67

67 13 Re

64 8 M

64 8 P

CO

67 0

WP 13 60

Ma 14 66

E 14 65

Go 23 33

Wg 14 74

CG 42 63

S 3 68

N 13 70

PM 0 74

A

B

C

R

TIME BALL
Drops at 1 p.m. S MT
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has risen about 0· on E coast.

M ss V'l	g	95	60	·21
Euston	b	96	56	0
G'lb'rn	g	100	62	·29
Wagga.	b	99	69	0
C. Geo.	c	68	60	·05

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METEOROLOGY.

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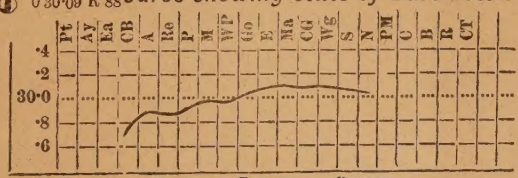
Average Annual Rainfall for 26 years .....50·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January— 3 0·331
Barometers corrected to 32° Fal and Mean Sea Level

Stations.	wb	M'x	Mn	R in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence .	–	—	—	—
Moree....	b	82	47	0·35
Grafton..	–	—	—	—
Gl'n Inn's	–	—	—	—
Inverell..	b	82	56	0
Bourke ..	b	108	72	0
Narrabri	b	101	70	0·68
Armidale	–	—	—	—
B'ndem'r.	b	77	46	0·05
Gunned'h	b	83	65	0·30
C'namble	–	—	—	—
Lismore..	–	—	—	—
Walcha ..	–	—	—	—
Tamw'rth	b	82	56	0·06
Coonab'n	b	79	56	0·14
P.M'cqrie	–	—	—	—
W'lcannia	–	—	—	—
M'rr'r'ndi	b	73	61	0·16
Taree....	g	74	66	0·42
Cassilis ..	b	82	62	0
M'ss'lbr'k	c	94	61	0
Dubbo. ..	b	96	62	0
Menindie.	c	95	72	0
Singleton	g	96	68	0
N'ls'n sB	p	94	63	0·65
Mudg	b	97	54	0·04
Maitland.	r	93	70	0·03
Hill End .	b	—	—	0·09
N'wcastle	r	81	66	0·50
Orange ..	b	84	51	0·13
Bathurst	c	84	52	0
Forbes...	b	98	68	0
M.V'ct'ria	g	—	57	0·60
Carcoar..	b	84	63	0
Cond'b'l'n	b	79	51	0
Marsdens	b	97	71	0
Picton. ..	u	78	62	0·18
Sydney ..	u	77	65	0·22
Wentw'th	c	99	66	0
Young. ..	b	95	59	0
Woll'g'ng	c	80	73	0
Taralga..	g	96	55	0
Hay	b	91	61	0

Stations.	wb	M'x	Mn	R'in
Queanbey'n	g	86	61	0
Deniliquin.	b	92	43	0
Moruya....	g	74	61	0
Kiandra ...	b	85	41	0
Albury	b	95	60	0
Bodalla....	g	74	57	0
Cooma	c	88	43	0
Eden	c	68	53	0

M ss V'l	u	77	55	·02
Euston	b	98	67	0
G'lb'rn	g	81	56	0
Wagga.	b	81	61	0
C. Geo.	c	70	60	·03

AS 0 30·09 R 88 *Curve showing state of Barometer.*



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85 29·91 R 0 B

CLOUDY GENERALLY

W 56 30·05 F 85

86 13 A 74 30·05 R 14 D

18 73 76 29·89 — 0 A

74 13 Re 71

67 18 P 8 M

65 8 CO

23 63 WP

Go 18 35

Ma 14 69

E 14 67

CG 42 64

Wg 28 71

S 9 67

N 8 67

PM

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TIME BALL
Drops at 1 p.m. S M T
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W E S

Barometer has risen about 0·10 on E coast.

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Stations.	wt	m'x	MN	R in.
Casino...	—	—	—	—
T'nt'rfield	c	92	55	0
Clarence.	c	86	68	0
Moree....	b	97	74	0
Grafton..	b	90	64	0·23
Gl'n Inn's	g	87	55	0
Inverell..	b	88	56	0
Bourke...	b	112	79	0
Narrabri	c	108	63	0
Armidale	b	78	69	0·17
B'ndem'r.	b	91	65	0
Gunned'h	b	97	—	0
C'namble	—	—	—	—
Lismore..	—	—	—	—
Walcha...	b	86	60	0·25
Tamw'rth	—	—	—	—
Coonab'n	—	—	—	—
P.M'quie	b	83	68	0
W'lcannia	b	—	—	0
M'rr'ndi	c	90	66	0·05
Tarce....	b	88	64	0·01
Cassilis..	—	—	—	—
M'ck'br'k	b	108	66	0·03
Dubbo...	b	104	67	0
Menindie.	b	101	77	0
Singleton	b	94	71	0·31
N'ls'n s P.	b	88	63	0
Muog	b	98	58	0
Maitland.	b	95	60	0
Hill End.	b	—	—	0
N'weastle	b	84	70	0
Orange..	b	90	57	0
Bathurst	b	91	55	0
Forbes...	b	102	67	0
M.V'ct'ria	b	—	70	0
Carcoar..	—	—	—	—
Cond'b'l'n	c	86	64	0
Marsdens	b	95	68	0
Picton...	b	89	59	0
Sydney...	b	79	69	0
Wentw'th	c	107	66	0
Young....	c	97	57	0
Well'g'ng	b	82	66	0
Taralga..	b	91	57	0
Hay.....	b	101	61	0
M ss V'l	b	88	61	0
Euston	c	99	62	0
G'lb'rn	b	88	53	0
Wagga.	b	100	59	0
C. Geo.	c	78	63	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
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TIME BALL
Drops at 1 p.m. S.M.T.
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

CLOUDY GENERALLY

Barometer has risen about 0·05 on S coast.

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9 A.M. JAN 6 1885

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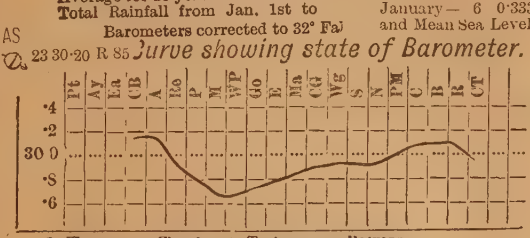
Total Rainfall from Jan. 1st to January — 6 0·333
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	b	96	63	0
T'nt'rfield	b	92	57	0·55
Clarence.	c	85	68	0
Moree....	b	102	75	0
Grafton..	c	95	66	0
Gl'n Inn's	b	85	58	0·36
Inverell..	b	95	68	0
Bourke ..	g	114	86	0
Narrabri	b	106	59	0
Armidalc	b	82	70	0·50
B'ndem'r.	b	98	63	0
Gunned'h	–	—	—	—
C'namble	o	—	—	0
Lismore..	b	93	66	0
Walcha..	b	90	59	0
Tamw'rth	b	101	68	0
Coonab'n	g	99	71	0
P.M'cqrie	b	82	68	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	95	74	0
Taree....	c	94	66	0
Cassilis ..	o	96	77	0
M'ss'lbr'k	c	108	71	0
Dubbo. ..	p	109	78	0
Menindie.	b	101	72	0·04
Singleton	g	95	75	0
N'ls'n & P.	–	—	—	—
Mudg	g	105	66	0
Maitland.	–	—	—	—
Hill End.	u	—	—	0
N'wcastle	c	86	69	0
Orange ..	r	93	69	0
Bathurst	r	96	50	0
Forbes...	p	106	69	0
M.V'ct'ria	g	—	70	0
Carcoar..	u	89	71	0
Cond'b'l'n	u	77	65	0·01
Marsdens	c	102	81	0
Picton. ..	u	86	68	0
Sydney ..	g	81	70	0
Wentw'th	c	93	63	0
Young. ..	p	103	71	0
Woll'g'ng	g	84	49	0
Taralga..	u	99	63	0
Hay	c	101	62	0·11

Stations.	wt	M'x	Mn	R'in
Queanbey'n	r	94	65	0·10
Deniliquin.	b	100	64	0·03
Moruya....	r	83	53	0·01
Kiandra...	r	87	51	0·58
Albury	u	100	65	0·25
Bodalla....	g	80	57	0
Cooma	r	98	47	0·05
Eden.....	r	—	—	0·01

Stations.	wt	M'x	Mn	R'in
M ss V'l	c	87	63	0
Euston	c	98	65	0
G'lb'rn	g	96	62	0
Wagga.	–	—	—	—
C. Geo.	g	78	66	0



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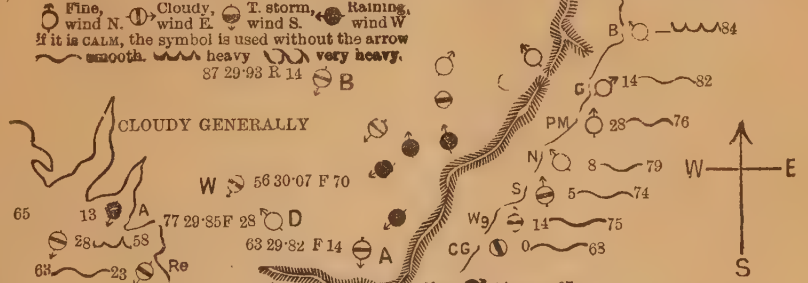

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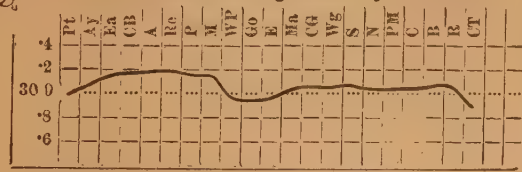
Stations.	wt	M'x	Mn	R in
Casino ...	b	102	69	0
T'nt'rfield	b	95	64	0
Clarence.	c	88	66	0
Moree....	b	99	75	0
Grafton..	c	96	70	0
Gl'n Inn's	c	92	62	0·07
Inverell..	b	93	71	0
Bourke ..	b	106	71	0
Narrabri	b	102	55	0
Armidale	b	80	71	0
B'ndem'r.	b	89	53	0·05
Gunned'h	b	96	75	0
C'namble	–	—	–	—
Lismore..	c	96	70	0
Walcha ..	b	87	62	0
Tamw'rth	b	95	64	0·05
Coonab'n	b	90	63	0
P.M'cqrie	c	79	67	0·04
W'lcannia	b	—	–	0
M'rr'r'ndi	b	89	70	0·10
Taree....	b	100	70	0·20
Cassilis ..	b	88	68	0
M'ss'lbr'k	b	96	67	0
Dubbo. ..	–	—	—	–
Menindie.	b	81	61	0
Singleton	b	94	75	0
N'ls'n sP	c	—	67	0·38
8 —				
Mudg'	–	—	—	—
Maitland.	c	96	72	0
Hill End.	b	—	–	0·35
N'wcastle	b	89	71	0·02
Orange ..	b	86	53	0·90
Bathurst	b	77	52	0·15
Forbes.	b	[illegible]	57	0·33
M. V'ct'ria	b	[illegible]	63	0
Carcoar..	b	77	58	0·41
Cond'b'l'n	b	75	5[illegible]	[illegible]2
Marsdens	b	9[illegible]	0[illegible]	0·03
Picton...	b	80	62	0
Sydney ..	c	8[illegible]	6[illegible]	0
Wentw'th	b	81	72	0
Young. ..	b	80	53	0·35
Wolf'g'ng	b	79	63	0·10
Taralga..	b	79	53	0·65
Hay	b	88	51	0

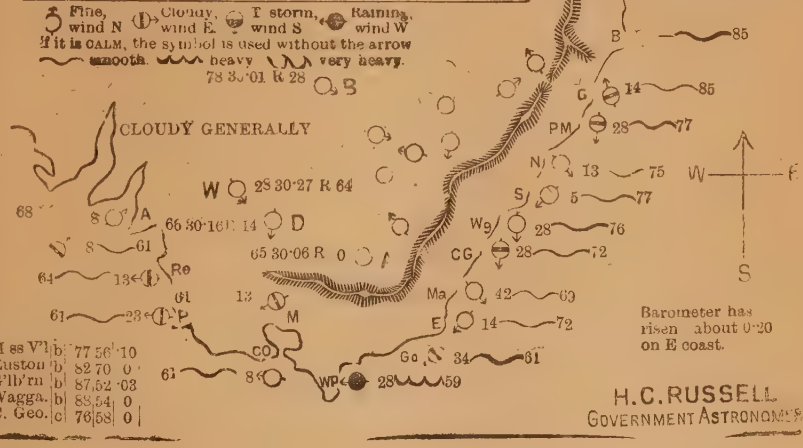
Stations.	wt	M'x	Mn	R in
Queanbey'n	b	76	57	0·36
Deniliquin .	b	89	50	0
Moruya....	b	86	59	0·07
Kiandra...	b	68	39	0·83
Albury	b	84	55	0
Bodalla....	b	85	48	0·09
Cooma	c	81	44	0·16
Eden	b	75	57	0·02

M ss V'l	b	77	56	·10
Euston	b	82	70	0
G'lb'rn	b	87	52	·03
Wagga.	b	88	54	0
C. Geo.	c	76	58	0

AS 13 30·20 R 82 *Curve showing state of Barometer.*



Fine, wind N — Cloudy, wind E — T storm, wind S — Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth — heavy — very heavy.



Barometer has risen about 0·20 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 8 1885

Sydney Observatory.

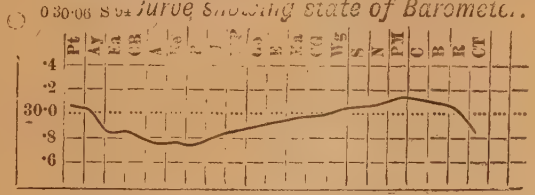
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

Average Annual Rainfall for 26 years ..... 50·24″.
Average for 26 years from Jan. 1st to December 31 ..... .
Total Rainfall from Jan. 1st to January — ..... .

Barometers corrected to 32° Fa ... Mean Sea Level

Stations.	Wt	M'x	Mn	R in
Casino ...	c	98	69	0
P'nt'rfield	u	97	62	0
Clarence .	—	—	—	—
Moree....	b	104	75	0
Grafton ..	—	—	—	—
Gl'n Inn's	o	94	66	0
Inverell..	b	95	71	0
Bourke ..	o	102	62	0
Narrabri	b	103	61	0
Armidale	—	—	—	—
B'ndem'r.	b	92	51	0
Gunned'h	b	100	74	0
C'namble	b	—	—	0
Lismore..	c	95	73	0
Walcha ..	g	68	52	0
Tamw'rth	b	99	69	0
Coonab'n	b	96	61	0
P.M'cqrie	b	81	62	0
W'cannia	b	—	—	0
M'rr'r'ndi	b	89	67	0
Taree....	b	81	63	0
Cassilis ..	b	89	67	0
M'ss'lbr'k	b	95	64	0
Dubbo. ..	b	95	65	0
Menindie.	b	87	69	0
Singleton	b	88	69	0
N'ls'n sE	b	85	65	0
♂ 18 82				
Mudg	c	96	56	0
Maitland.	c	85	67	0
Hill End.	b	—	—	0
N'wcastle	b	76	68	0
Orange ..	b	80	55	0
Bathurst	b	90	54	0
Forbes...	b	88	61	0
M. V'ct'ria	b	—	63	0
Carcoar..	b	78	56	0
Cond'b'l'n	b	78	56	0
Marsdens	b	90	66	0
Picton. ..	u	82	64	0
Sydney ..	g	80	67	0
Wentw'th	b	93	60	0
Young. ..	b	89	58	0
Woll'g'ng	c	81	65	0
Taralga..	b	86	55	0
Hay	b	87	59	0

Stations.	Wt	M'x	Mn	R'in
Queanbeyan	b	81	62	0
D'ndEquin.	b	89	50	0
M[illegible]	c	76	64	0
K[illegible]	b	75	37	0
Albany	b	86	56	0
B[illegible]	b	80	58	0
Coom[illegible]	b	87	49	0
Eden.....	b	80	73	0



Fine, wind N — Cloudy, wind E — T storm, wind S — Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 9 1885

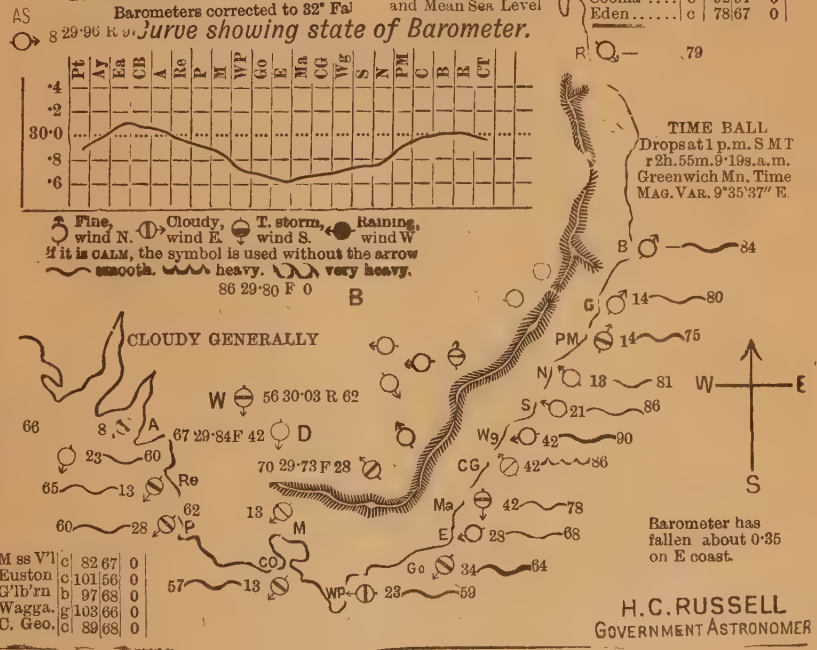
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·91*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January— 9 0·335
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino....	b	96	61	0
T'nt'rfield	b	82	62	0
Clarence.	c	84	66	0
Moree....	b	91	70	0
Grafton..	–	—	—	—
Gl'n Inn's	o	94	66	0
Inverell..	b	87	70	0
Bourke ..	b	114	71	0
Narrabri	b	102	62	0
Armidalc	b	77	67	0·84
B'ndem'r.	b	88	44	1·36
Gunned'h	b	99	74	0
C'namble	b	—	—	0
Lismore..	b	92	68	0
Walcha..	g	84	60	0
Tamw'rth	b	98	64	0·84
Coonab'n	b	97	68	0·09
P.M'cqrie	c	86	69	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	90	69	0·10
Taree....	g	89	69	0·01
Cassilis ..	b	93	73	0
M'ss'lbr'k	c	103	72	0·02
Dubbo. ..	b	103	74	0
Menindie.	c	94	65	0
Singleton	b	94	77	0·08
N'ls'n sB	c	89	70	0·01
8 66				
Mudg	b	96	65	0
Maitland.	c	92	74	0
Hill End.	b	—	—	0
N'wcastle	b	81	70	0
Orange ..	g	86	66	0
Bathurst	c	93	65	0
Forbes. ...	c	94	72	0
M.V'ct'ria	b	—	70	0
Carcoar..	b	84	71	0
Cond'b'l'n	b	82	66	0
Marsdens	b	97	68	0
Picton. ..	b	87	66	0
Sydney ..	b	87	70	0
Wentw'th	c	102	55	0
Young. ...	c	93	68	0
Woll'g'ng	c	89	69	0
Taralga..	b	91	60	0
Hay	b	93	65	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	88	68	0
Deniliquin.	b	99	59	0
Moruya....	g	80	69	0
Kiandra...	c	82	55	0
Albury . ..	u	96	68	0
Bodalla....	g	83	56	0
Cooma	c	92	54	0
Eden.....	c	78	67	0



M ss V'l	c	82	67	0
Euston	c	101	56	0
G'lb'rn	b	97	68	0
Wagga.	g	103	66	0
C. Geo.	c	89	68	0

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 10 1895

Sydney Observatory.

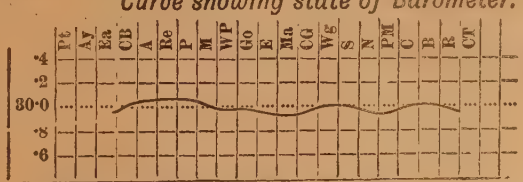
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·9*s.* *E.*

Average Annual Rainfall for 26 years ..... 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—10 537
Barometers corrected to 32° Fa and Mean Sea Level

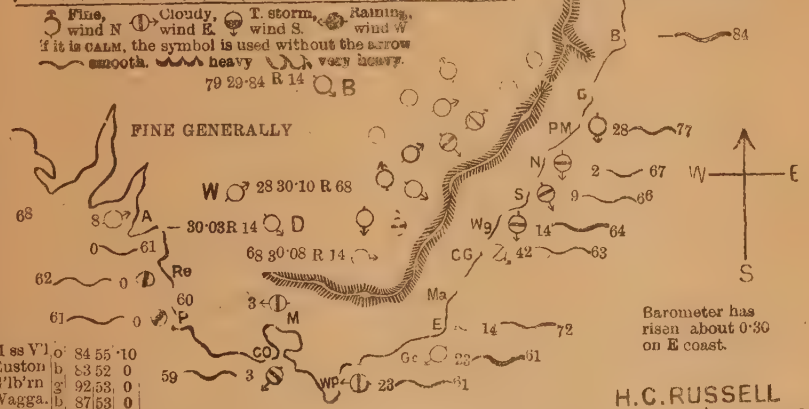
Stations.	w't	M'x	Mn	R'in
Cacino ..	b	102	70	0
Tam'rh'ad	b	91	—	0·02
Clarence.	-		—	—
Moree....	-	—	—	—
Grafton..	-	—	—	—
Gl'n Inn's	b	85	57	0·44
Inverell..	b	88	68	0
Bourke...	b	109	69	0
Narrabri .	b	102	61	0
Armidale	b	76	68	0·02
B'ndem'r.	b	89	49	0·17
Gunned'h	b	98	73	0
C'namble	b	—	—	0
Lismore..	-	—	—	—
Walcha..	b	80	62	0·10
Tamw'rth	b	96	67	0
Coonab'n	b	96	58	0
P.M'cqrie	b	82	67	0·78
W'lcannia	b	—	—	0
M'rr'mdi	b	91	71	0·04
Taree....	c	90	69	0·42
Cassilis ..	g	94	69	0
M'ss Tbr'k	g	104	65	0
Dubbo...	b	102	63	0
Menindie.	b	82	62	0
Singleton	b	100	71	0·02
N'ls'n sB	-	—	—	—
♂ 18 74				
Mudg	g	94	60	0
Maitland.	g	101	70	0·15
Hill End..	u	—	—	0
N'wcastle	g	95	65	0·40
Orange ..	b	86	57	0·02
Bathurst	b	88	57	0
Forbes...	b	89	60	0
M.V'ct'ria	g	—	51	0·27
Cartoar..	b	84	63	0
Cond'b'l'n	b	74	55	0
Marsdens	b	95	65	0
Picton...	d	91	59	0·32
Sydney ..	u	97	63	0·20
Wentw'th	b	81	54	0
Young...	b	95	55	0
Wol'g'ng	c	94	53	0·09
Taralga..	f	81	50	0
Hay	b	86	75	0
M ss V'l	c	84	55	·10
Euston	b	83	52	0
G'lb'rn	g	92	53	0
Wagga.	b	87	53	0
C. Geo.	c	72	61	0

Stations.	w't	M'x	Mn	R'in
Queanbey'n	b	90	59	0
Deniliquin.	b	82	49	0
Moruya....	-	—	—	—
Kiandra...	b	81	40	0
Albury	b	84	51	0
Bodalla....	-	—	—	—
Cooma	c	91	44	0
Eden.....	c	76	55	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy very heavy.



Barometer has risen about 0·30 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 12 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; *Long.* 10*h.* 4*m.* 50·31*s.* E.

Average Annual Rainfall for 26 years .....: 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—12 2·097
and Mean Sea Level

Barometers corrected to 32° Fa

Curve showing state of Barometer.

Stations.	wt	M'x	Mn	R in
Casino ...		98	72	0
Tw'rfield	u	98	62	0·61
Clarence.	c	88	72	0
Koree....	b	100	70	0
Gwalton..	c	91	67	0·10
Gl'n Inn's	b	92	31	1·60
Inverell..	b	94	70	0·07
Bourke ..	b	112	71	0
Narrabri	b	105	68	0
Armidale	b	78	68	0·21
B'ndem'r.	u	92	61	0·17
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	c	96	74	0
Walcha ..	b	85	60	0·48
Tamw'rth	b	100	67	0·36
Coonab'n	b	102	62	0
P.M'cqrie	–	—	—	—
W'lcannia	b	—	—	0
M'rr'r'ndi	r	84	66	0
Taree....	–	—	—	—
Cassilis ..	u	77	67	0
M'ss'lbr'k	u	75	66	0
Dubbo. ..	b	100	68	0
Menindie.	b	94	66	0
Singleton	u	73	66	0·05
N'ls'n sB	r	79	68	0·70
13 70				
Mudg	b	92	59	0
Maitland.	u	78	65	0·04
Hill End.	b	—	—	0
N'wcastle	g	73	65	0·17
Orange ..	c	84	58	0
Bathurst	c	84	59	0
Forbes...	b	104	65	0
M.V'ct'ria	g	—	57	0·22
Carcoar..	b	79	61	0
Cond'b'l'n	b	81	70	0
Marsdens	b	97	61	0
Picton. ..	d	70	62	0·14
Sydney ..	u	73	64	1·56
Wentw'th	b	102	70	0
Young. ..	b	95	63	0
Woll'g'ng	u	77	63	0·25
Taralga..	b	81	52	0
Hay	b	97	59	0

Stations.	wt	M'x	Mn	R in
Queanbey'n	c	78	61	0
Deniliquin.	b	100	49	0
Moruya....	r	75	63	0·19
Kiandra...	b	82	39	0
Albury	–	—	—	—
Bodalla....	r	89	54	0·11
Cooma	c	84	58	0
Eden.....	g	73	66	0·12

M ss V'l	g	62	57	·01
Euston	b	103	59	0
G'lb'rn	g	66	56	·02
Wagga.	–	—	—	—
C. Geo.	g	73	65	0

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

TIME BALL
Drops at 1 p.m. S M T
or 2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

FINE GENERALLY

Barometer has risen about 0·07 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 13 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·21*s.* *E.*

Average Annual Rainfall for 26 years .....t 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—13 2·107
and Mean Sea Level

Barometers corrected to 32° Fa

AS 13 29·98 R94 *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R in
Casino ...	c	99	66	0·82
T'nt'rfield	u	91	68	0·21
Clarence .	u	87	65	0·05
Moree....	b	98	69	0·22
Grafton ..	b	94	67	0·63
Gl'n Inn's	–	—	—	—
Inverell ..	b	87	60	0
Bourke ..	b	114	79	0
Narrabri	b	104	67	0·55
Armidale	g	77	65	0 96
B'ndem'r.	b	89	58	0·70
Gunned'h	b	95	70	0
C'namble	–	—	—	—
Lismore..	c	96	72	0·02
Walcha ..	c	81	57	0·03
Tamw'rth	b	92	60	0
Coonab'n	b	101	60	0·02
P.M'cqrie	b	83	64	0·08
W'icannia	b	—	—	0
M'rr'r'ndi	c	85	68	0·12
Taree....	g	89	65	0·05
Cassilis ..	g	82	63	0·25
M'ss'lbr'k	c	89	67	
Dubbo. ..	b	105	67	0
Menindie.	b	102	76	0
Singleton	b	82	71	0
N'ls'n sP.	o	90	70	0·02
18 69				
Mudg	b	100	57	0·12
Maitland.	b	85	68	0
Hill End .	b	—	—	0·12
N'wcastle	b	78	66	0·34
Orange ..	b	86	59	0
Bathurst	b	85	55	0
Forbes. ..	b	99	59	0
M.V'ct'ria	b	—	56	0·10
Carcoar ..	b	84	69	0
Cond'b'l'n	b	82	66	0
Marsdens	b	99	76	0
Picton. ..	c	74	62	0·02
Sydney ..	b	76	65	0·01
Wentw'th	b	108	79	0
Young. ..	b	98	76	0
Woll'g'ng	o	74	64	0·48
Taralga ..	b	73	51	0
Hay	b	104	60	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	78	68	0
Deniliquin .	b	107	66	0
Moruya....	b	78	64	0·02
Kiandra...	b	88	39	0
Albury	b	102	67	0
Bodalla....	b	79	55	0·04
Cooma	c	90	52	0
Eden.....	c	73	64	0

M ss V'l	b	70	61	·02
Euston	b	110	64	0
G'lb'rn	b	75	56	0
Wagga.	b	103	62	0
C. Geo.	c	73	63	0

FINE GENERALLY

W 42 30·06 F 72

70 0 A 83 29·94F 0 D

13 64 83 29·88 — 14 A

65 13 Re 64 13 M

62 18 P CO 61 8 WP 23 33 Go

R — 81

B 80

G 72

PM 0 73

N 8 74

S 5 75

Wg 0 73

CG 42 69

Ma 28 75

E 14 68

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·07 on E coast.

H. C. RUSSELL
Government Astronomer

METEOROLOGY.

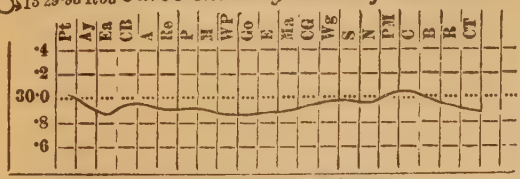
9 A.M. JAN 14 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·21*s.* *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—14 2·107
Barometers corrected to 32° Fa' and Mean Sea Level

AS 13 29·93 R.95 *Curve showing state of Barometer.*



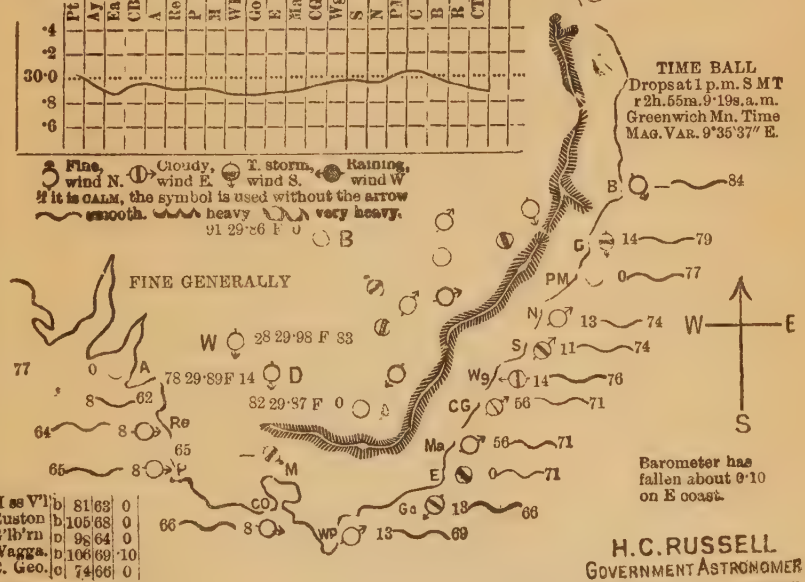
Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

Stations.	wt	M'x	Mn	R in
Casino	c	88	35	0
T'nt'rfield	u	84	66	0
Clarence .	c	87	68	0
Moree....	b	95	70	0
Grafton ..	–	—	—	—
Gl'n Inn's	u	83	56	0
Inverell..	o	84	63	0
Bourke ..	b	110	74	0
Narrabri	–	—	—	—
Armidalc	–	—	—	—
B'ndem'r.	b	87	57	0
Gunned'h	b	99	72	0
C'namble	b	—	—	0
Lismore..	c	89	69	0·03
Walcha ..	c	73	54	0
Tamw'rth	b	83	63	0
Coonab'n	b	94	57	0
P.M'cqrie	b	69	64	0·02
W'lcannia	b	—	—	0
M'rr'r'ndi	c	89	65	0
Taree....	g	85	64	0
Cassilis ..	b	86	65	0
M'ss'lbr'k	c	93	66	0
Dubbo. ..	b	98	71	0
Menindie.	c	99	76	0
Singleton	b	90	69	0
N'ls'n sl.	c	88	79	0
8 79				
Mudg	b	94	58	0
Maitland.	b	90	65	0
Hill End.	b	—	—	0
N'wcastle	b	79	67	0
Orange ..	c	87	62	0
Bathurst	b	96	63	0
Forbes. ..	c	102	66	0
M. V'ct'ria	b	—	64	0
Carcoar..	b	85	69	0
Cond'b'l'n	c	85	67	0
Marsdens	b	100	77	0
Picton. ..	c	80	62	0
Sydney ..	g	78	65	0
Wentw'th	b	101	68	0
Young. ..	g	101	68	0·15
Woll'g'ng	c	81	71	0
Taralga..	o	93	60	0
Hay	b	109	71	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	92	65	0·02
Deniliquin.	c	106	60	0
Moruya....	c	83	66	0
Kiandra...	c	90	41	0·60
Albury	b	104	73	0
Bodalla....	b	85	62	0·05
Cooma	c	98	55	0·71
Eden.....	g	74	67	0
M ss V'l	b	81	63	0
Euston	b	105	68	0
G'lb'rn	o	98	64	0
Wagga.	b	106	69	·10
C. Geo.	c	74	66	0



Barometer has fallen about 0·10 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

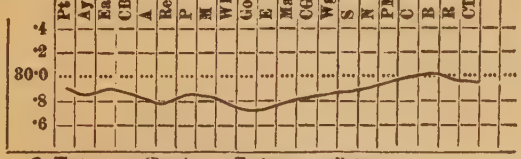
9 A.M. JAN 15 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·61*s.* *E.*

Average Annual Rainfall for 26 years .....t 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan, 1st to January—15 2·107
Barometers corrected to 32° Fa and Mean Sea Level

AS 13 29·32R 100 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

92 29·84 F 42 B

FINE GENERALLY

W 28 29·91 F 84

83 A 85 29·80F 14 D

79 29·77 F 14

8 67 66 13 Re 70 65 0 P 8 M 69 8 CO WP 3 64 M ss V'l b 84 61 * Euston c 110 61 0 G'lb'rn b 101 61 ·82 Wagga b 108 67 0 C. Geo. c 76 66 ·03

Ma E 14 72 Go 8 39 Wg 14 75 CG 42 75 0 76 S N PM 42 78 G B 86 R 77

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·10 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	m'x	mn	R in
Casino...	b	86	64	0·20
Tnt'rfield	c	85	56	0
Clarence..	–	—	—	—
Moree....	b	97	70	0
Grafton..	b	86	64	0
Gl'n Inn's	b	94	59	0
Inverell..	b	86	63	0
Bourke..	c	112	76	0
Narrabri	b	99	58	0
Armidale	b	77	66	0
B'ndem'r.	b	86	61	0
Gunned'h	c	101	72	0
C'namble	–	—	—	—
Lismore..	c	84	68	0·18
Walcha..	b	80	56	0
Tamw'rth	b	96	66	0
Coonab'n	g	99	65	0
P.M'cqrie	b	87	74	0
W'lcannia	–	—	—	0
M'rr'r'ndi	c	91	69	0
Taree....	b	83	65	0
Cassilis..	g	91	75	0
M'ss'lbr'k	b	101	70	0
Dubbo....	u	105	66	0·33
Menindie.	b	105	78	0
Singleton	b	93	71	0
N'ls'n sB	c	91	68	0
8 73 Mudg	c	99	63	0
Maitland.	b	90	68	0
Hill End.	–	—	—	—
N'wcastle	–	—	—	—
Orange..	c	89	63	0·42
Bathurst	c	97	63	0·06
Forbes...	b	109	73	0
M.V'ct'ria	b	—	65	0
Carcoar..	b	87	69	0·55
Cond'b'l'n	b	86	65	0
Marsdens	c	101	75	0·35
Picton....	b	84	62	0
Sydney..	c	77	68	0
Wentw'th	b	107	68	0
Young....	b	101	67	0·21
Woll'g'ng	c	78	67	0
Taralga..	o	98	53	0·20
Hay.....	b	107	64	0

Stations.	w't	m'x	mn	R'in
Qeaunbey'n	b	95	66	0·02
Deniliquin.	b	106	64	0
Moruya....	–	—	—	—
Kiandra...	c	84	50	0·11
Albury....	b	102	68	0·03
Bodalla....	b	85	59	0·06
Cooma	c	96	58	0
Eden.....	c	78	67	0·22

METEOROLOGY.

9 A.M. JAN 16 1885

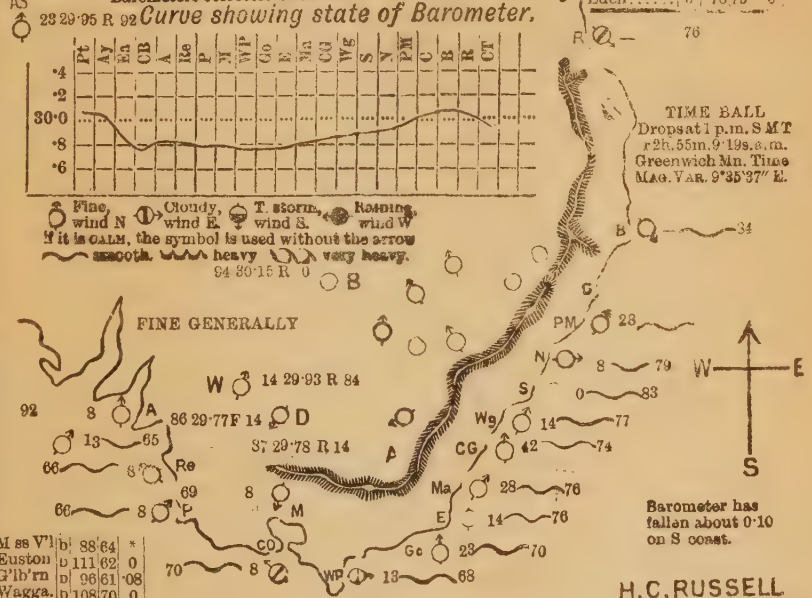
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·4*s.* *E.*

Average Annual Rainfall for 26 years ..... 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—16 2·108
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	m'x	mn	R in
Casino ...	b	95	65	0
T'nt'rfield	b	93	53	0
Clarence.	–	—	—	–
Moree....	b	97	73	0
Grafton..	–	—	—	—
Gl'n Inn's	b	96	61	0·03
Inverell..	b	88	63	0
Bourke ..	b	114	78	0
Narrabri	b	106	63	0
Armidale	–	—	—	–
E'nden'r.	b	89	55	0
Gunned'h	o	100	75	0
C'namble	b	—	—	0
Lismore..	c	93	68	0
Walcha ..	b	82	61	0
Tamw'rth	–	—	–	—
Coonab'n	b	93	62	0
P.M'cqrie	b	82	68	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	92	67	0
Tweed....	b	92	67	0
Cassilis ..	b	91	74	0
M'ss'lbr'k	b	96	74	0
Dubbo. ..	–	—	—	–
Menindie.	b	106	79	0
Singleton	b	99	74	0
N'ls'n s.P.	b	97	67	0
18 77 Mudg	b	99	61	0·63
Maitland.	b	99	74	0
Hill End.	b	—	—	0·05
N'wcastle	o	85	71	0
Orange ..	b	89	62	0·50
Bathurst	b	95	62	0·10
Forbes...	b	102	72	0
M.V'ct'ria	b	—	72	0·15
Carcoar.	b	86	66	0·05
Cond'b'l'n	b	0	64	0
Marsdens	b	99	75	0
Picton. ..	b	92	65	0·39
Sydney ..	b	84	70	0
Wentw'th	b	109	68	0
Young. ..	b	102	67	0·11
Woll'g'ng	b	81	66	0·20
Taralga..	o	94	60	0·07
Hay	o	107	67	0

Stations.	wt	m'x	mn	R in
Queanbey'n	b	94	67	0
Deniliquin.	b	108	51	0
Moruya....	b	86	65	0·29
Kiandra...	b	80	51	0
Albury	b	104	63	0
Bodalla....	c	94	61	0·10
Cooma	b	95	58	0
Eden.....	b	78	75	0



M ss V'l	b	88	64	*
Euston	b	111	62	0
G'lb'rn	b	96	61	·08
Wagga.	b	108	70	0
C. Geo.	b	80	66	·37

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 17 1885

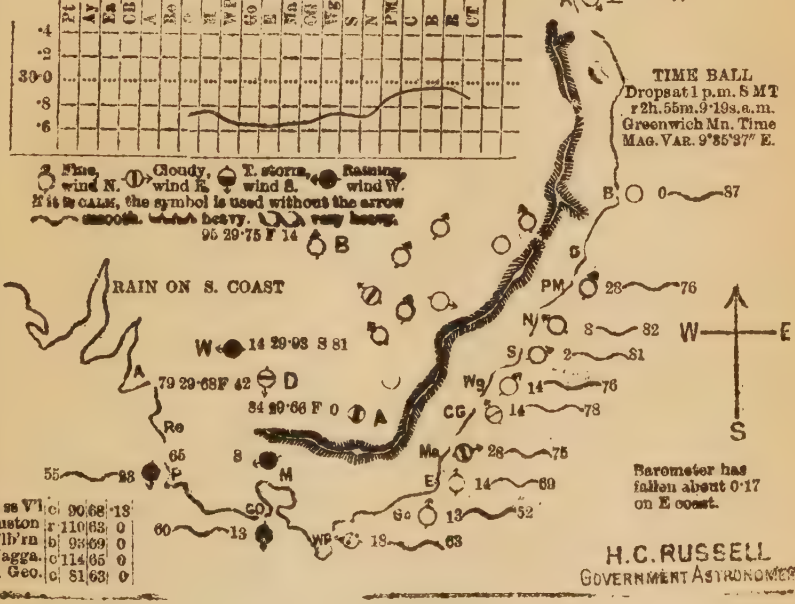
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·245.
Total Rainfall from Jan. 1st to January—17 2·169
Barometers corrected to 32° Fah and Mean Sea Level

AS

Curve showing state of Barometer.



Stations.	wt	m'x	m	R in.
Casino...	b	100	68	0
T'nt'rfield	c	89	63	0·01
Clarence.	–	—	—	—
Moree....	b	101	76	0
Grafton..	b	94	75	0
Gl'n Inn's	c	88	55	0
Inverell..	o	91	67	0
Bourke ..	b	116	84	0
Narrabri	b	105	52	0·12
Armidale	b	—	67	0·35
B'ndem'r.	b	93	49	0·27
Gunned'h	o	105	73	0·07
C'namble	b	—	—	0
Lismore..	c	95	70	0
Walcha..	b	89	57	0·06
Tamw'rth	–	—	—	—
Coonab'n	b	104	64	0
P.M'cqrie	b	82	67	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	95	73	0
Taree....	b	83	67	0
Cassilis ..	b	95	75	0
M'ss'lbr'k	b	108	73	0
Dubbo. ..	b	109	73	0·04
Menindie.	u	108	80	0
Singleton	b	102	71	0·09
N'ls'n sE	b	88	68	0
Mudg	b	102	63	0
Maitland.	b	99	70	0
Hill End.	o	—	—	0
N'wcastle	b	83	69	0
Orange ..	c	91	66	0
Bathurst	c	98	68	0
Forbes...	c	106	60	0
M.V'ct'ria	o	—	77	0
Carcoar..	b	90	79	0
Cond'b'l'n	g	91	70	0
Marsdene	b	104	81	0
Picton. ..	b	92	64	0·39
Sydney ..	b	87	76	0
Wentw'th	r	109	67	0·12
Young. ...	c	101	68	0
Wolf'g'ng	o	82	65	0
Taralga..	o	97	68	0
Hay	g	111	68	0

Stations.	wt	m'x	m	R in.
Qeaunbey'n	b	97	69	0
Deniliquin .	u	108	70	0
Moruya....	c	82	65	0
Kiandra...	c	87	44	0
Albury	c	103	65	0
Bodalla....	b	92	59	0
Cooma	c	98	57	0
Eden.....	c	81	70	0
M ss V'l	c	90	68	·13
Euston	r	110	63	0
G'lb'rn	b	93	69	0
Wagga.	c	114	65	0
C. Geo.	c	81	63	0

Barometer has fallen about 0·17 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 19 1885

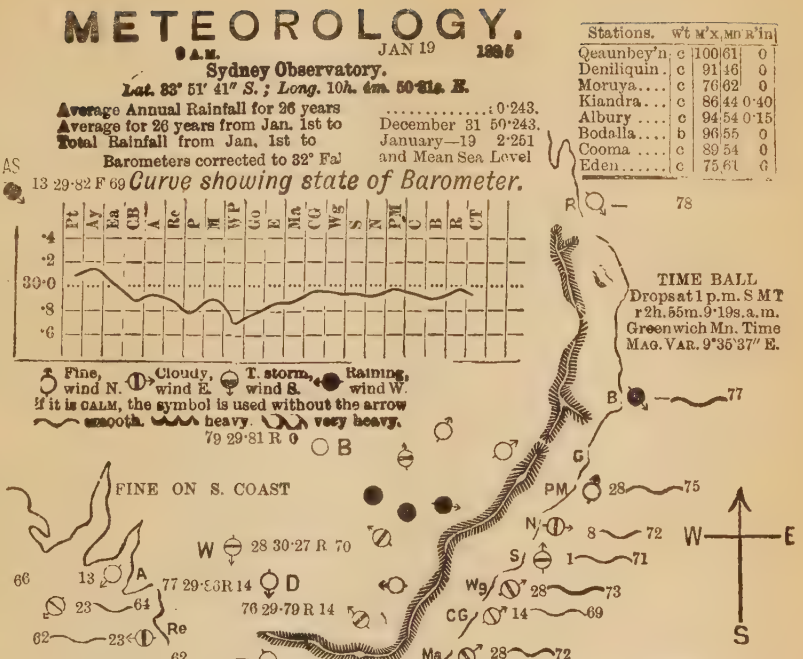
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

Average Annual Rainfall for 26 years .....: 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—19 2·251
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	Wt	M'x	Mn	R'in
Casino...	–	—	—	—
T'nt'rfield	u	92	61	0
Clarence.	–	—	—	-
Moree....	b	99	72	0·14
Grafton...	–	—	—	—
Gl'n Inn's	c	95	62	0
Inverell..	o	92	66	0
Bourke ..	c	96	70	0·22
Narrabri	c	92	53	0·26
Armidale	–	—	—	—
B'ndem'r.	c	89	54	0·53
Gunned'h	c	93	72	0·13
C'namble	c	—	—	0
Lismore..	–	—	—	—
Walcha..	b	89	67	0·34
Tamw'rth	–	—	—	—
Coonab'n	u	101	66	0·32
P.M'cqrie	c	85	67	0
W'lcannia	r	—	—	0·18
M'rr'r'ndi	c	95	68	0
Taree....	c	87	69	0
Cassilis ..	u	76	66	0·63
M'ss'lbr'k	g	72	65	0·01
Dubbo. ..	p	91	65	0·30
Menindie.	u	85	72	0·10
Singleton	g	75	65	0·29
N'ls'n sP.	g	79	66	0·26
Mudg	g	82	59	0·08
Maitland.	u	73	67	0·20
Hill End.	r	—	—	0·18
N'wcastle	g	77	65	0·20
Orange ..	r	80	60	0·01
Bathurst	u	99	60	0·15
Forbes. ..	r	88	66	0·11
M.V'ct'ria	c	–	65	0·50
Carcoar..	u	92	74	0·07
Cond'b'l'n	r	72	53	0·07
Marsdens	p	97	61	0·14
Picton. ..	u	71	60	0·02
Sydney ..	g	71	64	0
Wentw'th	c	90	60	0·09
Young. ..	u	97	70	0
Woll'g'ng	c	73	62	0
Taralga..	u	90	50	0
Hay	c	89	48	0·20

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	c	100	61	0
Deniliquin.	c	91	46	0
Moruya....	c	76	62	0
Kiandra...	c	86	44	0·40
Albury	c	94	54	0·15
Bodalla....	b	96	55	0
Cooma	c	89	54	0
Eden.....	c	75	61	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 20 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·61s. *E.*

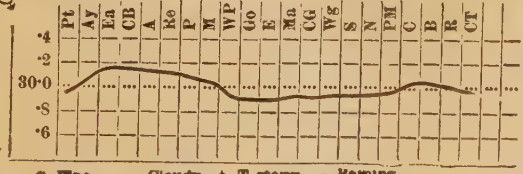
Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—20 2·369
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	m'x	mn	r'in
Casino ...	–	—	—	—
T'nt'rfield	u	97	67	0·10
Clarence .	u	85	69	0
Moree....	g	94	74	0·38
Grafton..	c	87	71	0
Gl'n Inn's	–	—	—	—
Inverell..	u	88	78	0
Bourke ..	u	94	68	0·67
Narrabri	r	102	57	0·12
Armidalc	–	—	—	—
B'ndem'r.	u	75	54	1·00
Gunned'h	–	—	—	—
C'namble	r	—	—	1·00
Lismore..	c	89	73	0·02
Walcha ..	r	78	63	0
Tamw'rth	–	—	—	—
Coonab'n	r	91	63	1·06
P.M'cqrie	u	80	68	0
W'lcannia	u	—	—	0
M'rr'r'ndi	u	85	70	1·00
Taree....	u	95	71	0·01
Cassilis ..	r	75	68	2·00
M'ss'lbr'k	r	85	69	0·66
Dubbo. ...	c	84	67	1·05
Meniudie.	g	90	63	0
Singleton	g	85	71	0·50
N'ls'n sB	g	84	65	0·18
13 72 Mudg	p	82	60	0·68
Maitland.	p	77	73	0·65
Hill End .	u	—	—	1·25
N'wcastle	p	78	71	0·57
Orange ..	g	74	61	1·05
Bathurst	p	73	61	0·55
Forbes. ...	g	79	69	0·70
M. V'ct'ria	u	—	60	0·25
Carcoar..	u	74	60	1·65
Cond'b'l'n	u	73	53	2·06
Marsdens	u	77	70	0·65
Picton. ...	u	79	69	0·57
Sydney ..	d	77	64	0·12
Wentw'th	c	92	53	0
Young. ...	u	74	70	1·23
Woll'g'ng	g	78	69	0·22
Taralga..	u	81	68	0·42
Hay.....	c	89	59	0

Stations.	wt	m'x	mn	r'in
Qeaunbey'n	g	72	62	0·42
Deniliquin.	g	89	53	0
Moruya....	g	78	64	0·10
Kiandra...	g	68	50	0·66
Albury	b	89	62	0
Bodalla....	g	81	59	0·37
Cooma	c	84	54	0·40
Eden.....	c	77	60	0·05

M ss V'l	u	77	57	·53
Euston	b	95	52	0
G'lb'rn	g	76	59	·24
Wagga.	c	79	62	·06
C. Geo.	g	75	65	·29

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

H.C. RUSSELL.
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 21 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years ..... 40·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—21 2·923
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	Wt	M'x	Mn	R in
Casino ...	g	99	71	0·62
T'nt'rfield	u	90	64	0·31
Clarence .	g	83	69	0·62
Moree....	r	86	66	0·37
Grafton...	u	99	69	2·20
Gl'n Inn's	u	80	52	0
Inverell..	g	84	71	0·95
Bourke ..	u	81	70	0
Narrabri	u	96	57	0·14
Armidale	u	73	67	0·30
B'ndem'r.	u	72	57	0·53
Gunned'h'	g	84	70	0·08
C'namble	c	—	—	0
Lismore..	c	94	72	0
Walcha..	u	75	60	0·37
Tamw'rth	c	75	69	1·81
Coonab'n	g	84	64	0·38
P.M'cqrie	g	81	68	1·15
W'lcannia	c	—	—	0
M'rr'ndi	u	77	65	0
Taree....	g	85	63	1·95
Cassilis ..	u	77	67	0·17
M'ss'lbr'k	g	79	67	0·07
Dubbo...	g	88	68	0
Menindie.	c	90	63	0
Singleton	g	81	71	0·03
N'b'n s B	c	88	67	0
Mudg	u	86	59	0
Maitland.	p	83	70	0·03
Hill End.	c	—	—	0
N'wcastle	g	78	67	0·05
Orange ..	c	79	60	0
Bathurst	u	81	58	0
Forbes...	c	82	62	0
M.V'ct'ria	g	—	55	0·28
Carcoar..	—	—	—	—
Cond'b'l'n	c	72	54	0
Marsdens	b	79	64	0
Picton....	o	77	61	0·32
Sydney ..	d	78	63	0·35
Wentw'th	c	82	60	0
Young....	c	83	58	0
Woll'g'ng	g	72	67	0·10
Taralga..	u	76	50	0
Hay	g	83	58	0

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	g	80	60	0
Deniliquin .	b	85	52	0
Moruya....	g	69	53	0
Kiandra...	o	76	33	0
Albury	b	87	55	0
Bodalla....	g	68	56	0
Cooma	g	85	50	0
Eden.....	b	72	60	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

CLOUDY GENERALLY

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·25 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 22 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·6*s.* *E.*

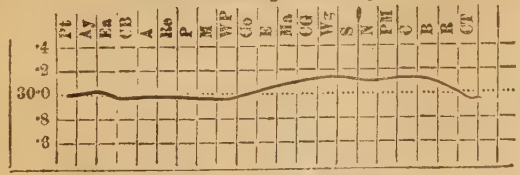
Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—22 3·087
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R in
Casino ...	c	87	69	0·17
T'nt'rfield	c	79	61	0
Clarence .	c	87	69	0
Moree....	g	76	68	0·38
Grafton ..	g	80	70	0·08
Gl'n Inn's	c	75	60	0
Inverell ..	o	79	67	0
Bourke ..	u	79	80	0·18
Narrabri	u	85	61	0·06
Armidale	u	69	66	0
B'ndem'r.	u	75	52	0
Gunned'h	u	86	71	0·05
C'namble	r	—	—	0
Lismore ..	u	94	72	0
Walcha ..	u	63	58	0
Tamw'rth	c	83	67	0
Coonab'n	g	86	65	0
P.M'cqrie	g	78	69	0
W'lcannia	r	—	—	0
M'rr'r'ndi	b	79	68	0
Taree....	c	85	69	0·01
Cassilis ..	c	73	67	0
M'ss'lbr'k	u	79	70	0
Dubbo. ..	g	88	67	0
Menindie.	p	87	72	0
Singleton	u	75	70	0
N'ls'n sB	c	87	69	0
Mudg	g	79	59	0
Maitland.	c	80	68	0
Hill End .	u	—	—	0
N'wcastle	c	76	68	0
Orange ..	-	-	—	—
Bathurst	g	82	62	0
Forbes...	g	88	58	0
M.V'ct'ria	g	—	59	0·07
Carcoar..	b	76	65	0
Cond'b'l'n	u	74	60	0
Marsdens	u	83	65	0
Picton. ..	o	69	68	0·14
Sydney ..	g	73	65	0·16
Wentw'th	g	92	67	0
Young. ...	g	94	64	0
Woll'g'ng	g	70	65	0·02
Taralga..	b	80	58	0
Hay	g	94	57	0

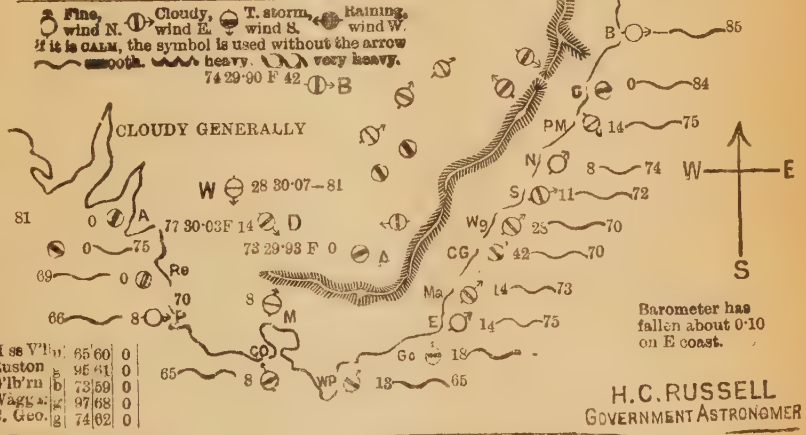
Stations.	wt	m'x	mn	R'in
Qeaunbey'n	c	73	64	0
Deniliquin .	g	92	62	0
Moruya....	g	76	64	0
Kiandra...	g	79	42	0
Albury	u	96	66	0
Bodalla....	b	75	60	0
Cooma	g	84	56	0
Eden.....	b	79	60	0

M ss V'lb		65	60	0
Euston	g	95	61	0
G'lb'rn	b	73	59	0
Wagga	g	97	68	0
C. Geo.	g	74	62	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 23 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·0s. *E.*

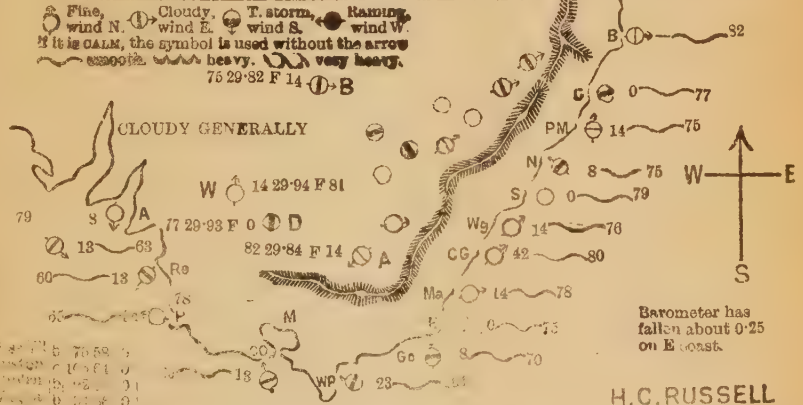
Average Annual Rainfall for 26 years .....10·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—23 3·088
Barometers corrected to 32° Fa' and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Qeaunbey'n	c	86	67	0
Denilquin .	c	98	66	0
Moruya....	b	80	66	0
Kiandra...	c	76	55	0·08
Albury	c	88	73	0
Bodalla....	b	84	60	0
Cooma	c	93	60	0
Eden.....	b	79	64	0

Stations.	wt	m'x	mn	R'in
Casino ...	c	92	70	0
T'nt'rfield	c	85	61	0
Clarence .	c	93	71	0
Moree....	—	—	—	—
Grafton ..	g	88	71	0
Gl'n Inn's	b	79	54	0
Inverell..	c	79	67	0
Bourke ..	u	81	69	0·01
Narrabri	—	—	—	—
Armidale	b	74	67	0
B'ndem'r.	u	77	58	0·01
Gunned'h	—	—	—	—
C'namble	c	—	—	0
Lismore..	c	92	71	0
Walcha ..	c	73	61	0
Tamw'rth	—	—	—	—
Coonab'n	p	80	64	0·14
P.M'cqrie	c	84	69	0·09
W'lcannia	u	—	—	0·76
M'rr'r'ndi	u	75	63	0·10
Tarce....	g	80	70	0·53
Cassilis ..	g	75	69	0
M'ss'lbr'k	g	80	69	0·02
Dubbo. ..	o	82	65	0·05
Menindie.	g	94	70	0·67
Singleton	g	82	71	0
N'ls'n sE	c	80	68	0·01
13 -- Mudg	u	81	61	0·03
Maitland.	c	88	77	0
Hill End .	g	—	—	0
N'wcastle	c	77	69	0·05
Orange ..	u	71	60	0
Bathurst	g	82	61	0
Forbes...	c	86	64	0
M.V'ct'ria	b	—	64	0
Carcoar..	b	76	[illegible]	[illegible]
Cond'b'l'n	u	71	55	0·13
Marsdens	b	74	[illegible]	[illegible]
Picton...	b	79	[illegible]	[illegible]
Sydney ..	[illegible]	[illegible]	[illegible]	[illegible]
Wentw'th	c	[illegible]	[illegible]	[illegible]
Young. ..	c	82	[illegible]	[illegible]
Woll'g'ng	b	76	[illegible]	[illegible]
Taraiga..	b	[illegible]	[illegible]	[illegible]
Hay	[illegible]	[illegible]	[illegible]	[illegible]

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 24 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·9s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—24 3·000
Barometers corrected to 32° Fa' and Mean Sea Level

Stations.	Wt	M'x	Mn	R in.
Casino	b	91	62	0
T'nt'rfield	b	88	60	0
Clarence .	b	93	68	0
Moree....	g	90	69	0
Grafton ..	c	84	67	0
Gl'n Inn's	b	94	62	0
Inverell..	b	83	68	0
Bourke ..	g	92	75	0
Narrabri	u	92	61	0
Armidale	b	79	70	0
B'ndem'r.	b	80	51	0
Gunned'h	c	91	72	0
C'namble	c	—	—	0
Lismore..	c	89	63	0
Walcha ..	c	79	60	0
Tamw'rth	b	88	[illegible]	0
Coonab'n	g	79	65	0
P.M'cqrie	c	81	68	0
W'lcannia	u	—	—	8·30
M'rr'ndi	o	79	68	0
Taree....	g	93	70	0
Cassilis ..	u	77	70	0
M'ss'lbr'k	g	85	70	0
Dubbo. ..	o	79	56	0·85
Menindie.	g	75	70	0·73
Singleton	b	88	74	0
N'le'n sR	c	88	67	0
13 —				
Mudg	r	76	61	0·41
Maitland.	b	93	75	0
Hill End .	p	—	—	0·24
N'wcastle	g	83	64	0
Orange ..	g	71	65	0·05
Bathurst	u	74	64	0
Forbes...	p	83	63	0·19
M.V'ct'ria	u	—	66	0
Carcoar..	u	79	68	0·09
Cond'b'l'n	p	74	59	0·05
Marsdens	r	85	73	0·66
Picton. ..	d	85	70	0·08
Sydney ..	g	87	69	0
Wentw'th	g	89	69	0
Young. ..	r	84	65	1·28
Woll'g'ng	p	90	75	0·06
Taralga..	r	81	62	0·10
Hay.....	r	71	57	0·06

Stations.	Wt	M'x	Mn	R in.
Queanbey'n	c	90	70	0
Deniliquin.	g	100	71	0
Moruya....	g	87	[illegible]	0
Kiandra...	g	71	55	0
Albury	c	91	71	0
Bodalla....	g	92	62	0
Cooma	g	95	63	0
Eden.....	c	83	64	0
M ss V'l	r	80	58	·21
Euston	g	101	71	0
G'lb'rn	d	88	67	0
Wagga.	r	97	73	0
C. Geo.	c	82	63	0

AS 18 30·09 R 75 *Curve showing state of Barometer.*

Pt Ly Ra CB A Re P M WP Go E Ma CG Wg S N PM C B R CT

30·4 ·2 30·0 ·8 ·6

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·10s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

CLOUDY GENERALLY

Barometer has risen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 26 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....t 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—25 3·220
Barometers corrected to 32° Fa and Mean Sea Level

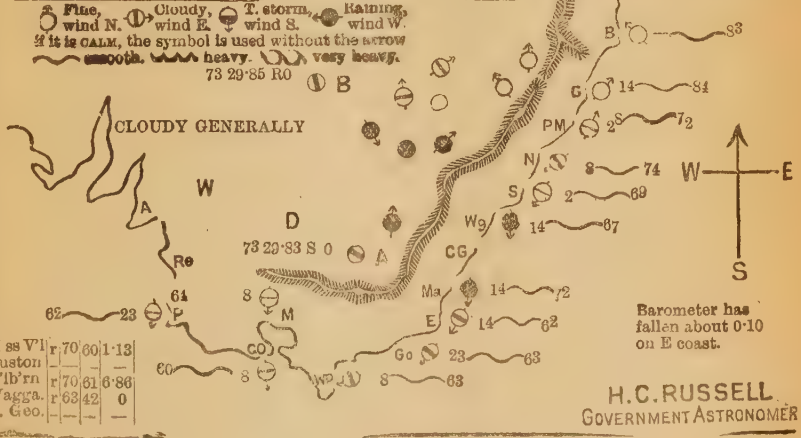
Stations.	wt	M'x	MN	R'in
Geaunbey'n	r	74	62	4·90
Deniliquin	-	—	—	—
Moruya....	r	69	62	1·49
Kiandra...	-	—	—	—
Albury	c	84	66	0·20
Bodalla....	-	—	—	—
Cooma	r	71	56	2·61
Eden.....	g	67	61	0·53

Stations.	wt	M'x	MD	R in
Casino...	b	88	65	0
T'nt'rfield	b	90	61	0
Clarence.	c	91	68	0
Moree....	g	94	74	0
Gratton..	c	96	69	0
Gl'n Inn's	g	92	65	0
Inverell..	b	87	30	0
Bourke ..	g	92	73	2·62
Narrabri	g	96	65	0
Armidale	b	79	72	0
B'ndem'r.	b	87	56	0
Gunned'h	g	98	79	0
C'namble	-	—	—	—
Lismore..	c	85	71	0
Walcha ..	b	82	62	0
Tamw'rth	-	—	—	—
Coonab'n	p	90	70	0
P.M'cqrie	c	79	68	0
W'leannia	-	—	—	—
M'rr'r'ndi	g	85	71	0
Taree....	b	95	71	0
Cassilis ..	g	82	70	0·05
M'ss'lbr'k	g	91	74	0·04
Dubbo. ..	r	85	70	0·33
Menindie.	-	—	—	—
Singleton	g	94	76	0
N'ls'n sB	g	79	69	0
Mudg	g	87	61	0·12
Maitland.	g	90	75	0
Hill End.	-	—	—	—
N'wcastle	g	78	70	0
Orange ..	r	74	64	0·77
Bathurst	r	82	65	0·31
Forbes...	r	—	—	1·08
M.V'ct'ria	p	—	65	0·30
Carcoar..	p	75	56	1·22
Cond'b'l'n	p	72	57	5·15
Marsdens	-	—	—	—
Picton...	p	77	66	1·91
Sydney ..	g	75	57	0·13
Wentw'th	-	—	—	—
Young...	-	—	—	—
Woll'g'ng	g	73	65	0·59
Taralga...	r	81	57	5·15
Hay	-	—	—	—
M ss V'l	r	70	60	1·13
Euston	-	—	—	—
G'lb'rn	r	70	61	6·86
Wagga.	r	63	42	0
C. Geo.	-	—	—	—

AS

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 27 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—27 3·800
Barometers corrected to 32° Fa and Mean Sea Level

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
SMOOTH. heavy. very heavy.

Stations.	W't	M'x	Mn	R'in
Casino ...	c	101	65	0
T'nt'rfield	r.	92	62	0·14
Clarence .	g	93	67	0
Moree....	d	94	72	0·10
Grafton..	r	98	69	0
Gl'n Inn's	p	93	66	0
Inverell..	u	87	44	0
Bourke ..	b	94	66	0
Narrabri	u	97	66	0
Armidalc	b	78	74	0
B'ndem'r.	r	87	57	0·26
Gunned'h	c	91	73	0·06
C'namble	b	—	—	0·20
Lismore..	c	95	74	0
Walcha ..	g	83	67	0·23
Tamw'rth	c	91	71	0·14
Coonab'n	c	82	65	0·68
P.M'cqrie	–	—	—	—
W'lcannia	b	—	—	0
M'rr'r'ndi	d	83	65	0·97
Taree....	d	95	68	0·37
Cassilis ..	p	84	67	0·60
M'ss'lbr'k	u	84	65	0·87
Dubbo. ..	b	82	61	1·33
Menindie.	–	—	—	—
Singleton	r	89	62	0·84
N'ls'n sP.	p	84	65	1·60
Mudg	u	79	58	0·60
Maitland.	p	98	65	0·72
Hill End.	u	—	—	0·83
N'wcastle	q	81	64	0·48
Orange ..	g	73	56	2·54
Bathurst	u	76	59	1·35
Forbes...	–	—	—	—
M.V'ct'ria	g	—	49	0·63
Carcoar..	–	—	—	—
Cond'b'l'n	b	61	44	0·02
Marsdens	b	85	61	0·05
Picton. ..	u	77	59	0·83
Sydney ..	g	75	64	0·58
Wentw'th	–	—	—	—
Young. ..	c	82	55	0·20
Woll'g'ng	g	91	54	0·39
Taralga..	r	82	58	1·02
Hay	g	87	51	0

Stations.	W't	M'x	Mn	R'in
Queanbey'n	u	73	52	0·34
Deniliquin.	–	—	—	—
Moruya....	c	70	57	0·61
Kiandra...	–	—	—	—
Albury	–	—	—	—
Bodalla....	g	75	53	3·25
Cooma	c	70	44	0·31
Eden.....	d	73	57	0·01

M ss V'l	c	64	53	0·47
Euston	–	—	—	—
G'lb'rn	u	72	51	1·52
Wagga.	–	—	—	—
C. Geo.	–	—	—	—

Barometer has risen about 0·20 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JAN 28 1885

9 A.M.

Sydney Observatory.

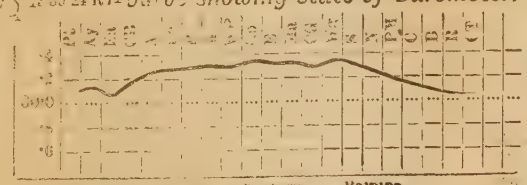
Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·248.
Total Rainfall from Jan. 1st to January—28 3·894
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	u	89	60	1·05
T'nt'rfield	c	72	51	0·95
Clarence .	c	77	62	0·51
Moree....	b	85	60	0·63
Grafton..	-	—	—	—
Gl'n Inn's	b	70	46	2·07
Inverell..	b	79	57	0·71
Bourke ..	b	79	61	0
Narrabri	b	96	65	0
Armidale	-	—	—	—
E'ndem'r.	u	71	39	[illegible]
Gunned'h	-	—	—	0
C'namble	b	—	—	—
Lismore..	r	87	63	[illegible]
Walcha ..	u	71	46	[illegible]
Tamw'rth	c	79	55	0
Coonab'n	c	80	50	0
P.M'cqric	b	76	57	[illegible]
W'lcannia	b	—	—	—
M'rr'r'ndi	o	69	55	0
Taree....	c	71	57	0·14
Cassilis ..	c	68	56	0
M'ss'lbr'k	c	68	56	0·01
Dubbo. ...	b	82	50	0
Menindie.	-	—	—	—
Singleton	b	70	60	0·04
N'ls'n sk	b	79	57	0·20
28 --				
Mudg	g	69	45	0
Maitland.	c	73	58	0·06
Hill End.	b	—	—	0
N'wcastle	b	67	46	0·09
Orange ..	c	70	43	0
Bathurst	g	64	45	0
Forbes...	b	70	50	0
M.V'ct'ria	g	—	45	0
Carcoar..	b	70	46	0
Cond'b'l'n	b	63	41	0
Marsdens	b	75	59	0
Picton...	u	66	54	0
Sydney..	d	65	56	0·09
Wentw'th	-	—	—	—
Young...	b	76	47	0
Woll'g'ng	g	69	65	0·12
Taralga..	b	69	42	0
Hay.....	g	78	55	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n'	b	64	48	0
Deniliquin.	-	—	—	—
Moruya....	c	68	55	0
Kiandra...	-	—	—	—
Albury	b	75	49	0
Bodalla....	-	—	—	—
Cooma	c	63	39	0
Eden.....	c	73	53	0·06

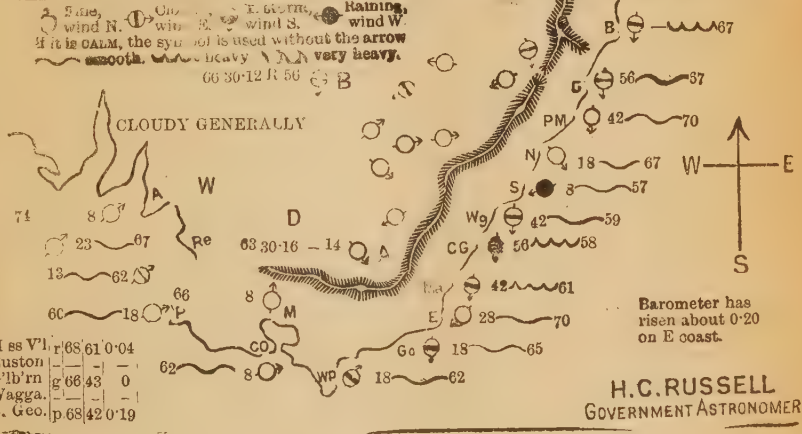
M ss V'l.	r	68	61	0·04
Euston	-	—	—	—
G'lb'rn	g	66	43	0
Wagga.	-	—	—	—
C. Geo.	p	68	42	0·19



Raining, wind W.

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.



Barometer has risen about 0·20 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 29 1885

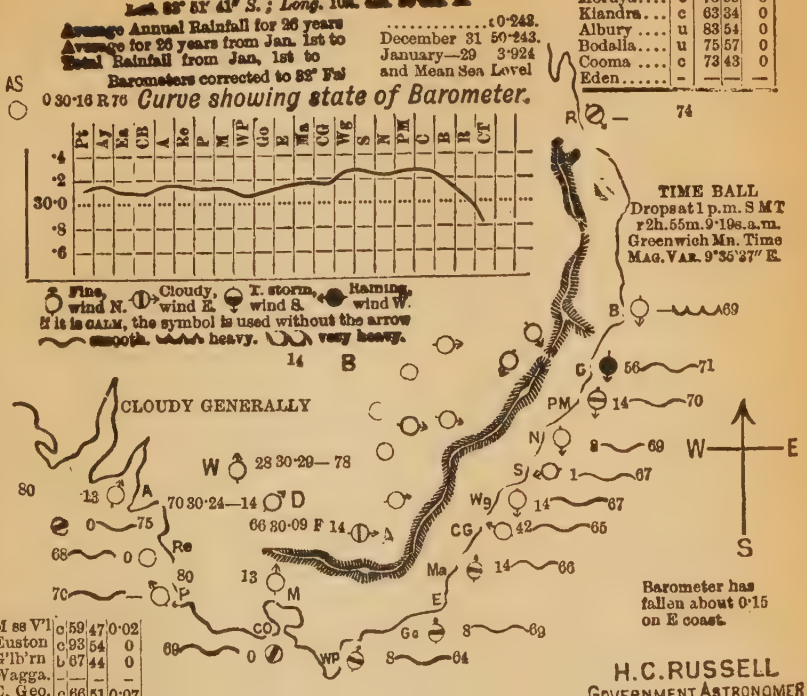
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....t 0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—29 3·924
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	m'x	mn	R in
Queanbey'n	b	68	50	0
Deniliquin	c	88	53	0
Moruya	c	73	55	0
Kiandra	c	63	34	0
Albury	u	83	54	0
Bodalla	u	75	57	0
Cooma	c	73	43	0
Eden	-	—	—	—

ns.	wt	m'x	mn	R in
Casino	c	78	61	0
T'nt'rfield	c	71	51	0
Clarence	p	76	62	0·21
Moree	b	89	61	0
Grafton	b	83	59	0
Gl'n Inn's	o	76	45	0
Inverell	b	77	55	0
Bourke	b	85	60	0
Narrabri	b	94	61	0
Armidale	b	65	57	0
B'ndem'r	b	72	36	0
Gunned'h	b	82	58	0
C'namble	b	—	—	0
Lismore	c	75	63	0·09
Walcha	c	63	43	0
Tamw'rth	b	77	53	0
Coonab'n	b	74	46	0
P.M'cqrie	c	75	59	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	69	54	0
Taree	b	76	57	0·01
Cassilis	b	67	53	0
M'ss'lbr'k	b	70	55	0
Dubbo	b	77	53	0
Menindie	b	82	63	0
Singleton	b	78	59	0
N'ls'n sB	c	86	70	0·02
13 -- Mudg	b	74	42	0
Maitland	b	77	60	0
Hill End	b	—	--	0
N'wcastle	b	72	62	0
Orange	b	66	45	0
Bathurst	b	68	44	0
Forbes	b	74	54	0
M.V'ct'ria	b	–	54	0·07
Carcoar	b	67	46	0
Cond'b'l'n	b	66	50	0
Marsdens	b	76	61	0
Picton	b	66	56	0
Sydney	b	68	57	0·03
Wentw'th	b	95	59	0
Young	b	74	49	0
Woll'g'ng	b	70	66	0·02
Taralga	b	65	42	0
Hay	b	85	59	0
M ss V'l	c	59	47	0·02
Euston	c	93	54	0
G'lb'rn	b	67	44	0
Wagga	–	—	–	–
C. Geo.	c	66	51	0·07



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JAN 30 1885

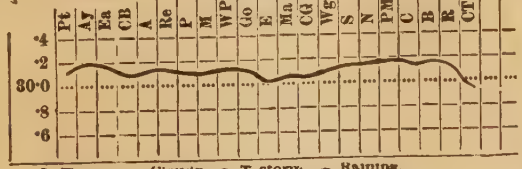
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—30 3·925
Barometers corrected to 32° Fa and Mean Sea Level

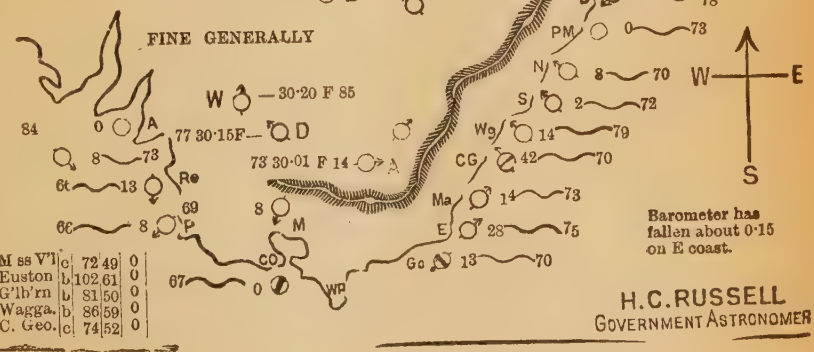
AS 13 30·16R 83 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

Stations.	Wt	M'x	Mn	R in
Casino ...	b	84	55	0
T'nt'rfield	c	79	51	0
Clarence .	b	82	61	0
Moree....	b	88	64	0
Grafton..	b	88	62	0
Gl'n Inn's	b	78	50	0
Inverell..	b	75	57	0
Bourke ..	b	94	64	0
Narrabri	b	99	67	0
Armidale	b	69	57	0
B'ndem'r.	b	73	37	0
Gunned'h	b	90	64	0
C'namble	b	—	—	0
Lismore..	b	84	62	0
Waicha ..	b	71	48	0
Tamw'rth	b	85	56	0
Coonab'n	b	86	52	0
P.M'cqrie	b	77	57	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	73	55	0
Taree....	b	82	55	0
Cassilis ..	b	76	58	0
M'ss'lbr'k	c	78	57	0
Dubbo. ..	b	87	54	0
Menindie.	b	87	67	0
Singleton	b	81	58	0
N'ls'n sB	b	86	56	0
8 -- Mudg	b	83	48	0
Maitland.	b	78	56	0
Hill End .	b	—	—	0
N'wcastle	b	73	58	0
Orange ..	b	74	50	0
Bathurst	b	80	50	0
Forbes. ..	b	74	57	0
M.V'ct'ria	b	—	63	0
Carcoar..	b	70	46	0
Cond'b'l'n	b	74	52	0
Marsdens	b	81	68	0
Picton. ..	b	79	53	0
Sydney ..	b	73	59	0
Wentw'th	b	101	65	0
Young. ..	b	83	54	0
Wolf'g'ng	b	77	68	0
Taralga..	b	81	59	0
Hay	b	91	63	0

Stations.	Wt	M'x	Mn	R in
Queanbey'n	b	75	57	0
Deniliquin.	b	94	56	0
Moruya....	b	80	57	0
Kiandra...	b	75	39	0
Albury	b	86	58	0
Bodalla....	b	84	47	0
Cooma	c	83	48	0
Eden.....	b	73	58	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JAN 31 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years .....10·243.
Average for 26 years from Jan. 1st to December 31 50·243.
Total Rainfall from Jan. 1st to January—31 3·925
Barometers corrected to 32° Fa' and Mean Sea Level

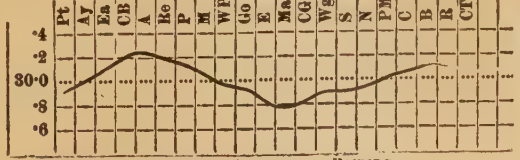
Stations.	wt	m'x	MD	R 1n
Casino....	b	90	55	0
T'nt'rfield	b	85	53	0
Clarence.	-	—	—	—
Moree....	b	93	85	0
Grafton..	-	—	—	—
Gl'n Inn's	b	91	54	0
Inverell..	b	82	62	0
Bourke ..	b	99	66	0
Narrabri	b	98	66	0
Armidalc	-	—	—	—
B'ndem'r.	b	80	46	0
Gunned'h	b	94	65	0
C'namble	-	—	—	—
Lismore..	b	91	58	0
Walcha ..	b	70	51	0
Tamw'rth	b	93	58	0
Coonab'n	b	91	52	0
P.M'cqrie	b	84	58	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	84	64	0
Taree....	b	89	56	0
Cassilis ..	b	84	64	0
M'ss'lbr'k	b	87	65	0
Dubbo. ...	b	97	58	0
Menindie.	b	94	73	0
Singleton	b	87	60	0
N'ls'n sB	b	92	56	0
Mudg	b	93	51	0
Maitland.	b	88	62	0
Hill End.	b	—	—	0
N'wcastle	b	82	65	0
Orange ..	b	79	55	0
Bathurst	b	87	54	0
Forbes...	b	86	55	0
M.V'ct'ria	b	—	70	0
Carcoar..	b	—	—	0
Cond'b'l'n	b	77	60	0
Marsdens	b	90	72	0
Picton...	b	87	56	0
Sydney ..	b	85	66	0
Wentw'th	b	104	60	0
Young...	b	93	56	0
Woll'g'ng	b	87	62	0
Taralga..	b	85	59	0
Hay	b	99	67	0

Stations.	wt	m'x	MD	R'in
Qeaunbey'n	b	84	59	0
Deniliquin.	b	100	60	0
Moruya....	b	86	59	0
Kiandra...	b	81	45	0
Albury	b	96	57	0
Bodalla....	b	90	51	0
Cooma	b	87	48	0
Eden.....	b	73	59	0

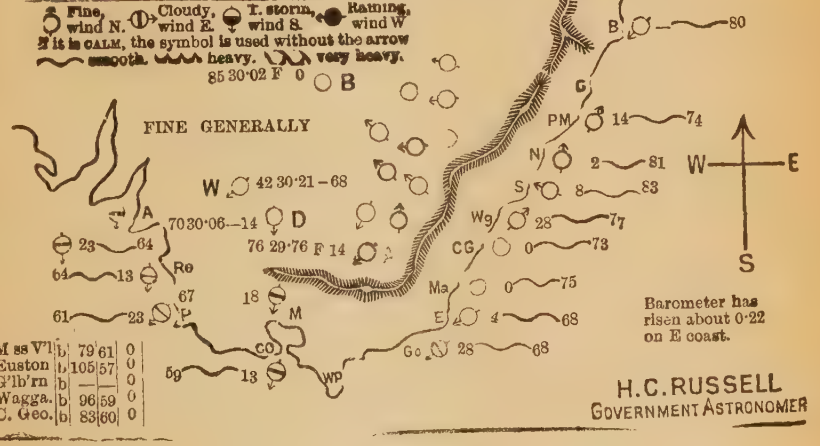
M ss V'l	b	79	61	0
Euston	b	105	57	0
G'lb'rn	b	—	—	0
Wagga.	b	96	59	0
C. Geo.	b	83	60	0

AS 13 30·09 R So

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



Barometer has risen about 0·22 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 2 1885

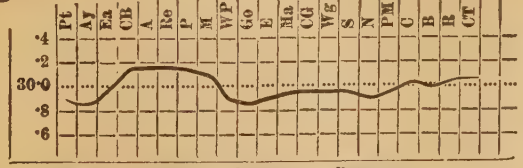
Sydney Observatory.

Lat. 33° 51′ 41″ S.; *Long.* 10h. 4m. 19·91s. E.

Average Annual Rainfall for 26 years .....(0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 2 3·926
and Mean Sea Level

Barometers corrected to 32° Fah

AS 13 30·10 R 92 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

82 29·95 F 14 B

FINE GENERALLY

W 28 30·21 S 66

62 30·06 S 14 D

74 29·91 R 28 A

TIME BALL
Drops at 1 p.m. S MT
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·10 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	m'x	MD	R in
Casino ...	b	91	60	0
T'nt'rfield	b	94	56	0
Clarence.	b	87	79	0
Moree....	b	102	73	0
Grafton..	b	96	69	0
Gl'n Inn's	b	97	54	0
Inverell..	b	89	16	0
Bourke ..	b	101	66	0
Narrabri	b	99	71	0
Armidale	b	78	65	0
B'ndem'r.	b	89	65	0
Gunned'h	b	100	68	0
C'namble	-	—	—	—
Lismore..	b	92	65	0
Walcha ..	b	83	59	0
Tamw'rth	b	98	63	0
Coonab'n	b	96	52	0
P.M'cqrie	b	81	67	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	93	66	0
Taree....	b	84	64	0·01
Cassilis ..	b	85	65	0
M'ss'lbr'k	b	84	64	0
Dubbo...	b	98	55	0
Menindie.	b	92	72	0
Singleton	b	93	61	0
N'ls'n sB	b	84	56	0
13 Mudg	b	95	51	0
Maitland.	b	99	64	0
Hill End.	b	—	—	0
N'wcastle	b	83	68	0
Orange ..	b	82	54	0
Bathurst	b	90	52	0
Forbes...	b	88	54	0
M.V'ct'ria	b	—	61	0
Carcoar..	b	80	54	0
Cond'b'l'n	b	75	55	0
Marsdens	b	71	69	0
Picton...	c	81	54	0·01
Sydney ..	b	74	63	0
Wentw'th	b	95	60	0
Young...	c	93	52	0
Woll'g'ng	c	78	59	0
Taralga..	b	87	52	0
Hay.....	-	—	—	-

Stations.	wt	m'x	MD	R'in
Queanbey'n	g	88	61	0
Deniliquin.	b	92	52	0
Moruya....	g	75	63	0
Kiandra...	c	78	46	0
Albury	b	93	54	0
Bodalla....	b	83	66	0
Cooma	c	87	52	0
Eden.....	c	82	58	0

M ss V'l	c	73	56	0
Euston	b	100	56	0
G'lb'rn	b	87	53	0
Wagga.	b	96	56	0
C. Geo.	-	—	—	—

METEOROLOGY.

FEB. 3 1885

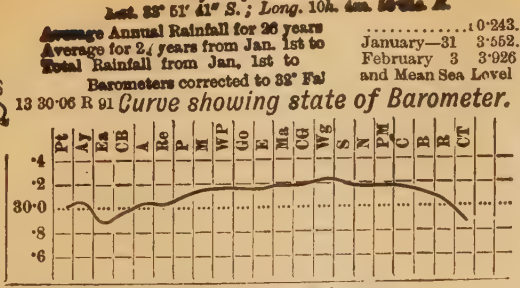
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 3 3·926
Barometers corrected to 32° Fah and Mean Sea Level

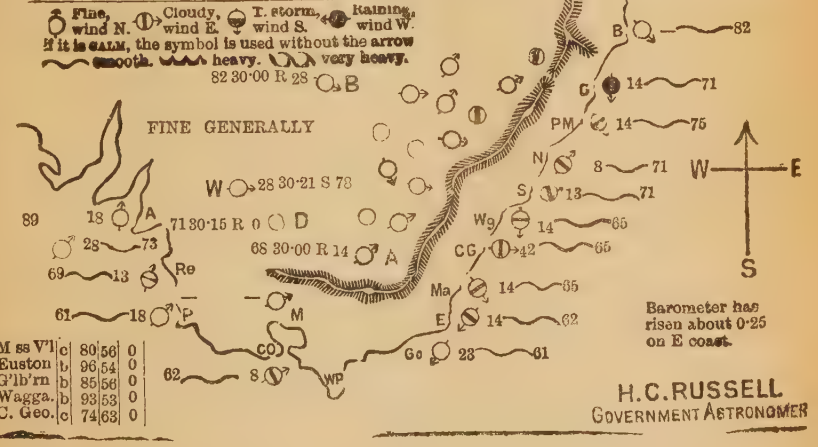
AS 13 30·06 R 91 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R in
Casino ...	c	102	66	0
T'nt'rfield	c	92	62	0
Clarence.	d	95	66	0
Moree....	b	100	70	0
Grafton..	c	103	73	0
G'n Inn's	c	98	56	0
Inverell..	b	89	70	0
Bourke ..	b	103	70	0
Narrabri	b	102	75	0
Armidale	b	80	70	0
B'ndem'r.	b	89	46	0
Gunned'h	–	—	—	—
C'namble	–	—	—	—
Lismore..	c	100	71	0
Walcha..	c	82	57	0
Tamw'rth	b	98	66	0
Coonab'n	b	94	65	0
P.M'cqrie	c	85	68	0
W'lcannia	–	—	—	—
M'rr'r'ndi	b	91	62	0
Taree....	c	85	68	0·01
Cassilis ..	g	83	67	0
M'ss'lbr'k	c	93	65	0
Dubbo. ...	b	95	59	0
Menindie.	b	90	69	0
Singleton	g	95	70	0
N'ls'n sE	c	94	56	0
13 Mudg	b	99	58	0
Maitland.	g	90	70	0
Hill End.	b	—	—	0
N'wcastle	g	85	67	0
Orange ..	b	85	49	0
Bathurst	b	90	50	0
Forbes...	b	92	56	0
M.V'ct'ria	b	—	60	0
Carcoar..	c	78	56	0
Cond'b'l'n	b	74	58	0
Marsdens	b	81	66	0
Picton...	u	83	64	0
Sydney ..	c	78	67	0
Wentw'th	b	94	62	0
Young...	b	95	52	0
Wolf'g'ng	g	82	61	0·25
Taralga..	c	85	58	0
Hay.....	b	91	58	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	84	61	0
Deniliquin.	b	89	49	0
Moruya....	g	78	63	0
Kiandra...	b	81	34	0
Albury	b	90	54	0
Bodalla....	g	79	60	0
Cooma	b	85	47	0
Eden.....	g	82	56	0



Barometer has risen about 0·25 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 4 1885

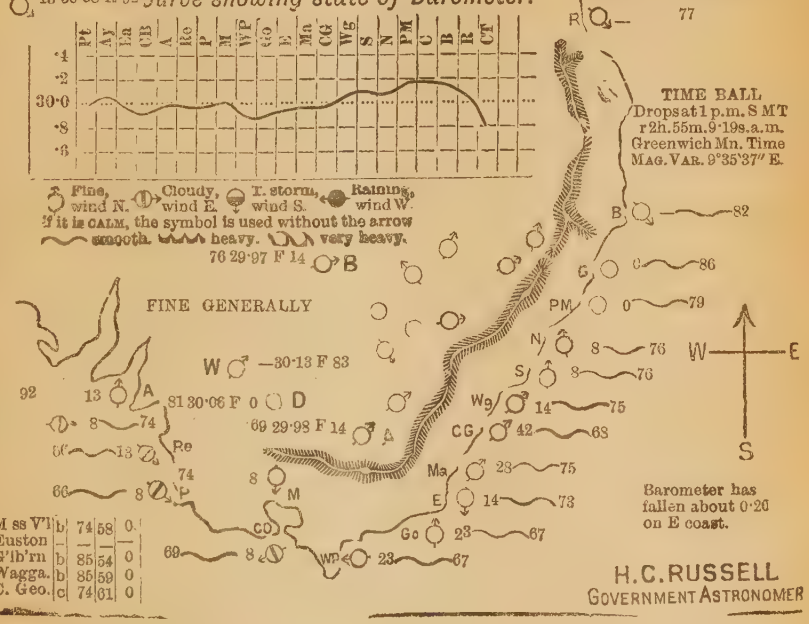
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 4 3·927
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	b	95	61	0
T'nt'rfield	b	88	62	0
Clarence.	b	88	63	0
Moree....	b	100	74	0
Grafton..	c	88	71	0
Gl'n Inn's	b	94	64	0
Inverell..	b	90	60	0
Bourke ..	b	104	70	0
Narrabri	b	106	72	0
Armidale	b	79	70	0
B'ndem'r.	b	90	51	0
Gunned'h	–	--	—	—
C'namble	b	--	—	0
Lismore..	c	93	68	0
Walcha ..	c	80	63	0
Tamw'rth	b	98	70	0
Coonab'n	b	98	61	0
P.M'cqrie	b	82	70	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	86	65	0
Taree....	b	81	69	0·01
Cassilis ..	b	82	70	0
M'ss'lbr'k	b	83	62	0
Dubbo. ...	b	96	64	0
Menindie.	b	94	69	0
Singleton	b	85	65	0
N'ls'n sP.	c	89	59	0
13 --				
Mudg	b	99	55	0
Maitland.	b	80	67	0
Hill End.	b	—	--	0
N'wcastle	b	78	68	0
Orange ..	b	80	54	0
Bathurst	b	88	54	0
Forbes...	b	95	58	0
M. V'ct'ria	b	—	64	0
Carcoar..	b	77	56	0
Cond'b'l'n	b	76	54	0
Marsdens	b	89	68	0
Picton. ..	b	81	58	0
Sydney ..	b	77	64	0
Wentw'th	b	104	67	0
Young. ..	b	96	57	0
Wolf'g'ng	b	76	61	0
Taralga..	b	81	68	0
Hay	b	97	62	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	80	60	0
Deniliquin.	b	100	59	0
Moruya....	b	77	60	0
Kiandra...	b	81	34	0
Albury	b	99	58	0
Bodalla....	b	77	53	0
Cooma	b	87	51	0
Eden.....	c	73	62	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 5 1886

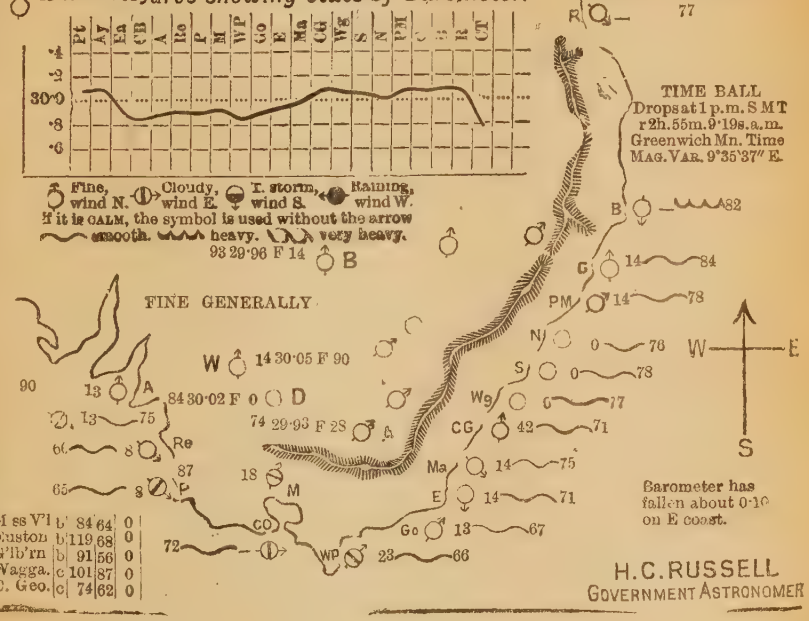
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·31s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 5 3·929
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	96	64	0
T'nt'rfield	b	83	60	0
Clarence .	b	95	63	0
Moree....	b	98	74	0
Grafton ..	b	95	68	0
Gl'n Inn's	f	93	60	0
Inverell ..	b	90	69	0
Bourke ..	b	113	76	0
Narrabri	b	108	80	0
Armidale	b	81	71	0
B'ndem'r.	b	90	49	0
Gunned'h	b	100	75	0
C'namble	b	--	--	0
Lismore..	c	93	70	0
Walcha ..	b	86	69	0
Tamw'rth	b	98	67	0
Coonab'n	b	99	59	0
P.M'cqrie	b	84	67	0
W'lcannia	b	--	--	0
M'rr'ndi	b	93	67	0
Taree....	b	89	65	0
Cassilis ..	b	91	69	0
M'ss'lbr'k	b	94	72	0
Dubbo. ...	b	103	63	0
Menindie.	b	98	73	0
Singleton	b	95	71	0
N'ls'n sl.	b	88	66	0
13 --				
Mudg	b	99	57	0
Maitland.	b	93	65	0
Hill End .	b	—	--	0
N'wcastle	b	82	69	0
Orange ..	b	85	58	0
Bathurst	b	94	57	0
Forbes. ..	b	105	69	0
M.V'ct'ria	b	—	76	0
Carcoar..	b	82	59	0
Cond'b'l'n	b	79	61	0
Marsdens	b	95	73	0
Picton. ..	b	91	59	0
Sydney ..	b	83	67	0
Wentw'th	b	112	67	0
Young. ..	b	98	60	0
Woll'g'ng	b	82	61	0
Taralga..	b	93	69	0
Hay	b	105	71	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	88	64	0
Deniliquin .	b	106	68	0
Moruya....	b	83	60	0
Kiandra...	b	80	41	0
Albury	b	101	63	0
Bodalla....	b	95	53	0
Cooma	b	87	52	0
Eden.....	b	81	69	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

FEB. 6 1895

8 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·9s. E.

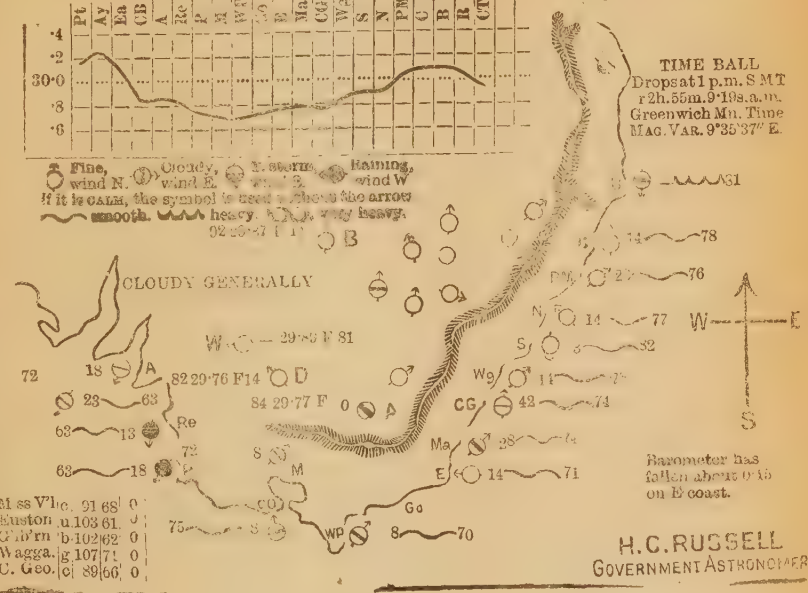
Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 6 3·930

Barometers corrected to 32° Fa and Mean Sea Level

0 30·05 R 90 *Curve showing state of Barometer.*

Stations.	wt	M'x	Mn	R in
Casino...	b	96	61	0
T'nt'rfield	b	94	61	0
Clarence.	b	97	61	0
Moree....	b	102	71	0
Grafton..	g	95	65	0
Gl'n Inn's	b	97	66	0
Inverell..	b	114	76	0
Bourke...	b	105	75	0·15
Narrabri	b	84	70	0
Armidale	b	91	46	0
B'ndem'r.	—	—	—	—
Gunned'b.	—	—	—	—
C'ramble	b	—	—	0
Lismore..	c	95	64	0
Walcha..	b	90	58	0
Tamw'rth.	b	102	68	0
Coonab'n	b	103	66	0·02
P.M'cqrie	b	86	67	0
W'lcannia	b	—	—	0
M'rr'ndi	b	96	77	0
Taree....	b	94	63	0
Cassilis..	b	96	79	0
M'ss'br'k	b	105	70	0
Dubbo...	b	108	72	0·10
Menindie.	b	104	71	0
Singleton	b	101	71	0
N'ls'n s E	b	90	68	0
23				
Mudg	b	104	61	0
Maitland.	b	96	55	0
Hill End..	b	—	—	0
N'wcastle	b	84	69	0
Orange..	c	90	62	0
Bathurst	b	102	61	0
Forbes...	b	108	72	0
M.V'ct'ria	b	—	77	0
Carcoar..	b	86	56	0
Cond'b'l'n	u	88	67	0
Marsdens	c	101	71	0
Picton...	b	95	58	0
Sydney..	b	88	70	0
Wentw'th	g	112	73	0
Young...	c	103	67	0
Woll'g'ng	b	82	60	0
Taralga..	b	101	68	0
Hay.....	c	111	76	0

Stations.	wt	M'x	Mn	R'fa
Queanbey'n	b	92	67	0
Deniliquin.	b	112	71	0
Moruya....	f	82	66	0
Kiandra...	c	92	50	0
Albury....	c	108	72	0
Bodalla....	b	90	60	0
Cooma....	u	101	55	0
Eden.....	b	77	68	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

ICAL REPORT.—FEB

Fine, but cloudy, with light E

METEOROLOGY.

9 A.M. FEB. 7 1885

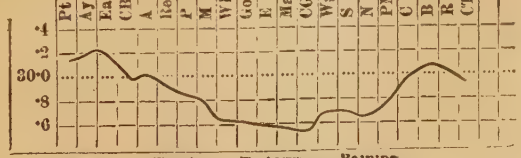
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 7 4·090
and Mean Sea Level

Barometers corrected to 32° Fa

AS 13 30·10 R 80 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

89 29·73 F 14 B

CLOUDY GENERALLY

W —29·98 R 58

60 29·98R 28 D

61 29·73 F 28

23 58 A

23 59 Re

56 23 P

55

18 M

CO

WP 23 56

Ma 28 76

E

Go

CG 56 73

Wg 14 77

S 2 80

N 0 81

PM 23 74

G 14 79

B 75

R 76

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·20 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino ...	b	94	58	0
T'nt'rfield	b	92	56	0
Clarence .	b	94	60	0
Moree....	b	95	69	0
Grafton ..	b	94	67	0
Gl'n Inn's	c	90	60	0
Inverell..	b	91	68	0
Bourke ..	b	112	78	0
Narrabri	c	97	59	0
Armidale	b	84	73	0
B'ndem'r.	c	91	49	0
Gunned'h	–	—	—	—
C'namble	u	—	–	0
Lismore..	b	93	65	0
Walcha ..	b	91	60	0
Tamw'rth	c	103	74	0
Coonab'n	g	100	64	0
P.M'cqrie	h	80	67	0
W'lcannia	b	—	—	0·74
M'rr'r'ndi	b	96	78	0
Taree....	b	95	66	0
Cassilis ..	g	95	76	0
M'ss'lbr'k	g	106	78	0
Dubbo. ..	o	104	71	0·05
Menindie.	c	98	63	0·37
Singleton	b	104	75	0
N'ls'n s P	b	89	67	0
13 -- Mudg	g	103	64	0
Maitland.	b	101	73	0
Hill End.	b	—	—	0
N'wcastle	b	83	69	0
Orange ..	g	91	65	0·10
Bathurst	u	98	65	0·03
Forbes...	g	107	61	0·66
M.V'ct'ria	g	—	64	0
Carcoar..	c	88	52	0
Cond'b'l'n	u	33	51	0·21
Marsdens	u	99	66	0·19
Picton...	b	98	67	0·02
Sydney ..	g	87	70	0·16
Wentw'th	c	89	52	1·43
Young....	p	100	63	0·18
Woll'g'ng	u	83	65	0·12
Taralga..	u	91	84	0
Hay.....	–	—	—	—

Stations.	wt	M'x	Mn	R'in
M ss V'l	c	92	69	0
Euston	u	90	4[illegible]	·37
G'lb'rn	u	100	66	·02
Wagga.	p	104	57	·95
C. Geo.	d	79	70	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	p	95	69	0·02
Deniliquin.	c	105	52	0·39
Moruya....	g	87	70	0·14
Kiandra...	r	88	54	1·87
Albury	c	105	59	0·55
Bodalla....	g	98	68	0·03
Cooma	p	97	64	0·05
Eden.....	–	—	—	—

METEOROLOGY.

9 A.M. FEB. 9 1905

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·61s. *E.*

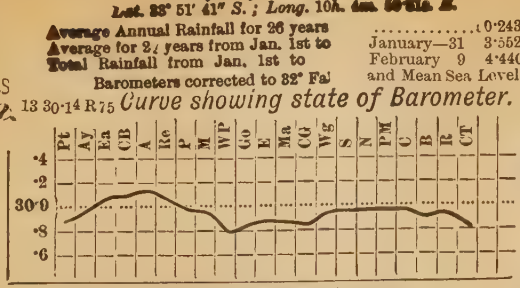
Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 9 4·440
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R in
Casino ...	c	104	70	0
T'nt'rfield	o	95	56	0
Clarence .	g	85	62	0
Moree....	b	90	58	0·03
Grafton ..	c	104	65	0
Gl'n Inn's	b	98	46	0
Inverell..	b	91	55	0
Bourke ..	b	84	55	0
Narrabri	b	90	57	0
Armidale	b	80	65	0·16
B'ndem'r.	b	84	31	0
Gunned'h	c	86	56	0
C'namble	b	—	—	0
Lismore..	–	—	—	—
Walcha ..	b	75	50	0·14
Tamw'rth	b	83	47	0
Coonab'n	b	81	40	0
P.M'cqrie	c	76	66	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	87	55	0
Taree....	c	78	63	0
Cassilis ..	b	70	52	0
M'ss'lbr'k	b	82	57	0·16
Dubbo. ..	b	79	43	0
Menindie.	b	57	53	0
Singleton	b	84	61	0
N'ls'n s P	b	75	55	0·02
13 Mudg	b	93	39	0
Maitland.	b	83	55	0
Hill End.	b	—	—	0
N'wcastle	b	76	60	0
Orange ..	b	64	41	0
Bathurst	b	81	38	0
Forbes...	b	97	58	0
M.V'ct'ria	b	—	52	0
Carcoar..	b	70	40	0
Cond'b'l'n	b	32	42	0·07
Marsdens	–	—	—	—
Picton...	b	70	47	0·05
Sydney ..	b	78	58	0·35
Wentw'th	b	74	45	0
Young...	–	—	—	—
Woll'g'ng	b	80	55	0
Taralga..	b	80	60	0
Hay	b	74	44	0

Stations.	wt	m'x	Mn	R'in
Qeaunbey'n	–	—	—	—
Deniliquin.	b	76	42	0
Moruya....	b	73	54	0
Kiandra...	b	60	34	0·10
Albury	b	70	47	0
Bodalla....	b	98	40	0·26
Cooma	b	68	43	0
Eden.....	b	75	58	0

M ss V'l	b	67	49	0
Euston	b	74	42	0
G'lb'rn	b	66	43	·21
Wagga.	b	73	45	0
C. Geo.	b	74	52	0

AS 13 30·14 R 75 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

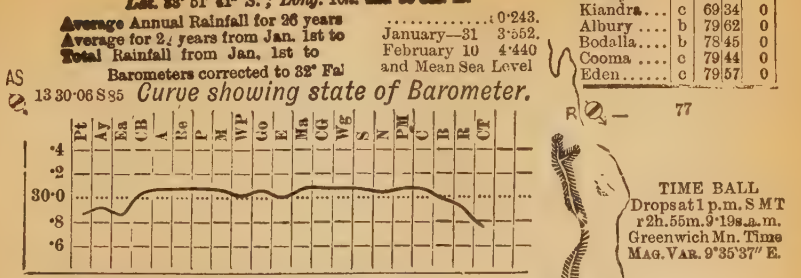
FEB. 10 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 10 4·440
Barometers corrected to 32° Fa and Mean Sea Level



Barometer has risen about 0·10 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	m'x	mn	R in
Casino ...	u	95	68	1·10
T'nt'rfield	u	92	63	0
Clarence .	c	84	62	0
Moree....	b	93	58	0
Grafton..	c	95	65	0
Gl'n Inn's	u	91	60	0
Inverell..	c	85	61	0
Bourke ..	b	86	56	0
Narrabri	b	96	56	0
Armidalc	b	75	66	0
B'ndem'r.	b	85	44	0
Gunned'h	b	92	67	0
C'namble	b	—	—	0
Lismore..	g	96	72	1·69
Walcha ..	u	80	58	0
Tamw'rth	b	88	60	0
Coonab'n	b	85	43	0
P.M'cqrie	c	82	64	0
W'lcannia	b	--	--	0
M'rr'r'ndi	b	81	60	0
Taree....	b	85	61	0
Cassilis ..	b	77	61	0
M'ss'lbr'k	b	83	61	0
Dubbo. ..	b	86	51	0
Menindie.	b	72	61	0
Singleton	b	85	64	0
N'ls'n sB	b	80	58	0
8 --				
Mudg	b	88	50	0
Maitland.	b	83	60	0
Hill End.	b	—	--	0
N'wcastle	b	76	66	0
Orange ..	-	--	--	—
Bathurst	b	78	46	0
Forbes...	b	98	56	0
M.V'ct'ria	b	—	53	0
Carcoar..	b	67	39	0
Cond'b'l'n	-	—	—	—
Marsdens	-	—	—	—
Picton...	b	79	47	0
Sydney ..	b	78	58	0
Wentw'th	b	85	30	0
Young. ..	-	--	—	—
Wol'g'ng	b	79	50	0
Taralga..	b	79	45	0
Hay	b	81	55	0

Stations.	wt	m'x	mn	R'in
Qeaunbey'n	b	73	54	0
Deniliquin.	b	83	44	0
Moruya....	c	75	54	0
Kiandra...	c	69	34	0
Albury	b	79	62	0
Bodalla....	b	78	45	0
Cooma	c	79	44	0
Eden	c	79	57	0

M ss V'l	c	72	51	0
Euston	b	86	55	0
G'lb'rn	b	76	44	0
Wagga.	b	82	52	0
C. Geo.	c	74	56	0

METEOROLOGY.

9 A.M. FEB. 11 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·61*s. E.*

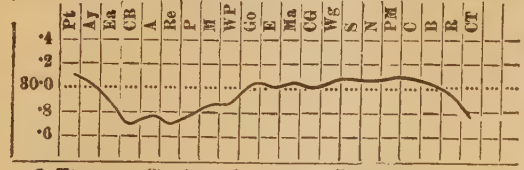
Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 11 4·440
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	Wt	M'x	Mn	R in
Casino ...	c	86	68	0·02
T'nt'rfield	u	85	56	0·38
Clarence .	c	87	62	0
Moree....	b	100	65	0
Grafton..	c	91	64	0
Gl'n Inn's	c	80	60	0
Inverell..	b	88	66	0
Bourke ..	b	96	61	0
Narrabri	b	98	58	0
Armidalc	b	76	67	0
B'ndem'r.	b	80	45	0
Gunned'h	b	97	72	0
C'namble	b	—	—	0
Lismore..	c	84	73	0
Walcha..	c	75	59	0
Tamw'rth	b	95	67	0
Coonab'n	b	93	58	0
P.M'cqrie	c	81	67	0
W'lcannia	b	--	--	0
M'rr'r'ndi	b	84	64	0
Taree....	c	75	61	0
Cassilis ..	b	82	66	0
M'ss'lbr'k	b	85	63	0
Dubbo. ...	b	96	65	0
Menindie.	c	85	63	0
Singleton	b	95	65	0
N'ls'n sB	c	84	64	0
34 -- Mudg	b	93	56	0
Maitland.	b	80	65	0
Hill End .	b	—	--	0
N'wcastle	b	76	68	0
Orange ..	c	78	53	0
Bathurst	b	86	51	0
Forbes. ..	b	89	57	0
M.V'ct'ria	g	—	56	0
Carcoar..	b	75	46	0
Cond'b'l'n	b	74	54	0
Marsdens	b	86	69	0
Picton. ..	b	81	54	0
Sydney ..	c	75	61	0
Wentw'th	b	95	32	0
Young. ..	g	92	57	0
Wolf'g'ng	b	80	58	0
Taralga..	b	84	47	0
Hay	b	91	59	0

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	b	78	56	0
Deniliquin.	b	92	56	0
Moruya....	c	77	59	0
Kiandra...	c	76	41	0
Albury	g	90	52	0
Bodalla....	b	81	53	0
Cooma	g	87	52	0
Eden.....	c	77	62	0
M ss V'l	c	73	56	0
Euston	b	96	56	0
G'lb'rn	b	83	50	0
Wagga.	b	91	62	0
C. Geo.	b	73	61	0

AS 13 29·92 F 89

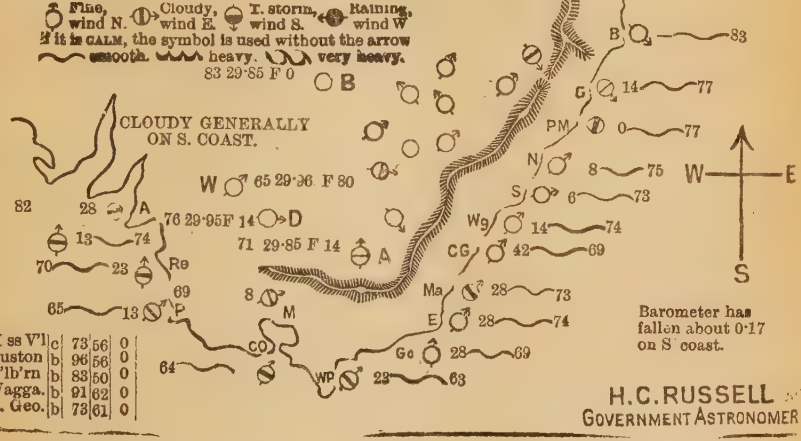
Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 12 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·4*s.* *E.*

Average Annual Rainfall for 26 years .....t 0·243.
Average for 2. years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 12 4·688
Barometers corrected to 32° Fa and Mean Sea Level

AS 13 30·05 R 82 *Curve showing state of Barometer.*

	Pt	Ay	Ea	CB	A	Re	P	M	WP	Go	E	Ma	CG	Wg	S	N	PM	C	B	R	CT
·4																					
·2																					
30·0																					
·8																					
·6																					

Fine, wind N. Cloudy, wind E. T. storm, wind S. Rainy, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

82 29·78 F 0 B

CLOUDY GENERALLY

W 56 29·89 F 64

63 23 A 69 29·81 F 42 D

69 29·71 F 14

34 5.0 Re

58 23 60

8 M

58 34 P

CO

58 8 WP 23 60

Go

Ma 28 74

E 28 68

Wg 14 60

CG 56 60

S 12 61

N 8 69

PM 0 72

C 0 82

B 83

R — 80

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·20 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER.

Stations.	Wt	M'x	Mn	R in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence .	c	87	64	0
Moree....	b	95	75	0
Grafton..	b	91	65	.0
Gl'n Inn's	g	91	62	0·08
Inverell..	g	83	71	0
Bourke ..	u	108	74	0
Narrabri	p	98	57	0·90
Armidale	c	78	68	0·24
B'ndein'r.	r	87	41	0·72
Gunned'h	u	99	72	0 48
C'nambla	p	—	—	0
Lismore..	b	87	65	0
Walcha ..	r	79	59	0·07
Tamw'rth	c	97	67	0·60
Coonab'n	g	96	66	0·59
P.M'cqrie	r	84	69	0·02
W'lcannia	b	—	—	0
M'rr'mndi	u	85	68	1·78
Tarce....	g	84	67	0·17
Cassilis ..	g	85	70	0·60
M'ss'lbr'k	r	89	68	0·50
Dubbo. ..	u	99	71	0·05
Menindie.	q	95	60	0
Singleton	u	84	64	0·01
N'ls'n sP.	p	88	68	0·24
13 65 Mudg	u	96	61	0·41
Maitland.	r	85	70	0·26
Hill End.	p	—	—	0
N'wcastle	g	76	68	0
Orange ..	u	83	63	0·09
Bathurst	–	—	—	—
Forbes...	c	97	55	0
M. V'ct'ria	p	—	60	0·20
Carcoar..	–	—	—	—
Cond'b'l'n	–	—	—	—
Marsdens	c	90	70	0
Picton. ..	o	80	64	0·02
Sydney ..	t	76	67	0·25
Wentw'th	b	96	30	0
Young. ..	c	91	67	0
Wolf'g'ng	g	79	64	0·22
Taralga..	b	85	51	0
Hay	c	96	63	0

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	b	81	64	0
Deniliquin .	u	98	63	0
Moruya....	c	78	67	0
Kiandra...	b	78	40	0
Albury	t	93	62	0·11
Bodalla....	b	81	65	0
Cooma	c	86	60	0
Eden.....	c	78	68	0

M ss V'l	c	73	62	·28
Euston	c	99	60	0
G'lb'rn	b	81	60	·01
Wagga.	u	95	66	0
C. Geo.	g	74	66	·20

METEOROLOGY.

FEB. 13 1885

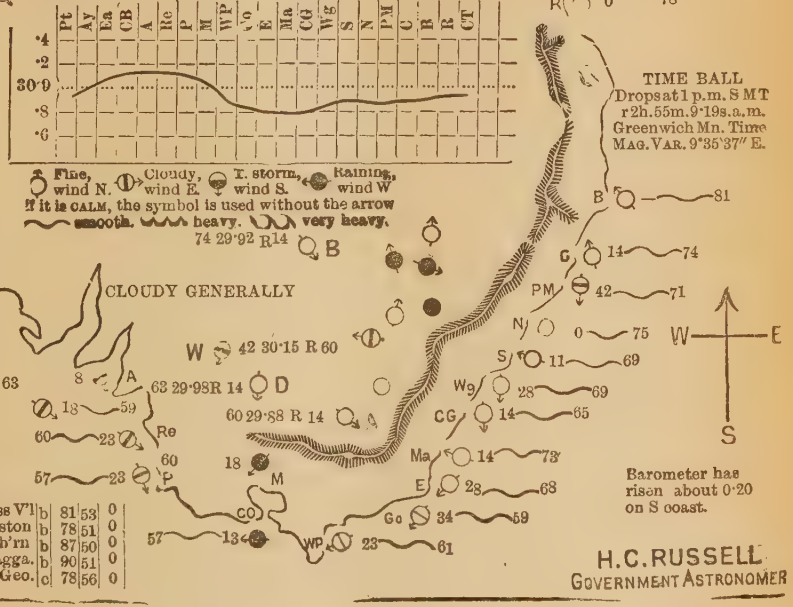
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 13 5·065
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

13 29·99 R 80 *Curve showing state of Barometer.*



Barometer has risen about 0·20 on S coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R in
Casino ...	b	97	68	0·87
T'nt'rfield	c	85	63	0·50
Clarence .	c	90	63	0·67
Moree....	g	94	65	0·22
Grafton ..	b	92	66	0·57
Gl'n Inn's	g	73	59	0·36
Inverell..	c	89	67	0·60
Bourke ..	c	107	62	0
Narrabri	c	90	51	0·42
Armidalc	c	72	67	0·37
B'ndem'r.	g	80	43	0·07
Gunned'h	c	87	66	0·06
C'namble	c	—	—	0
Lismore..	b	92	68	0·72
Walcha ..	c	84	61	0·64
Tamw'rth	c	84	62	0·59
Coonab'n	b	89	57	0
P.M'cqrie	c	76	66	0·64
W'lcannia	b	—	—	0
M'rr'r'ndi	b	76	66	0·10
Taree....	g	84	—	0·46
Cassilis ..	b	81	65	0·12
M'ss'lbr'k	b	82	67	0·12
Dubbo. ...	b	95	55	0
Menindie.	c	89	60	0
Singleton	b	83	70	0·05
N'ls'n sB	c	82	67	0
18 67				
Mudg	b	90	53	0
Maitland.	b	77	68	0·04
Hill End.	b	—	—	0
N'wcastle	b	78	66	0·30
Orange ..	b	80	50	0·17
Bathurst	b	85	51	0
Forbes...		98	53	0
M.V'ct'ria	b	—	55	0·15
Carcoar..	b	80	58	0
Cond'b'l'n	b	65	48	0
Marsdens	b	87	62	0
Picton. ..	b	84	56	0
Sydney ..	b	75	63	0·38
Wentw'th	c	78	53	0
Young. ..	b	92	52	0
Wolf'g'ng	b	79	56	0
Taralga..	b	83	52	0
Hay.....	b	77	51	0

M ss V'l	b	81	53	0
Euston	b	78	51	0
G'lb'rn	b	87	50	0
Wagga.	b	90	51	0
C. Geo.	c	78	56	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	56	44	0
Deniliquin.	b	88	49	0
Moruya....	b	79	57	0·09
Kiandra...	b	76	40	0·22
Albury	b	80	52	0
Bodalla....	b	86	54	0·38
Cooma	c	86	43	0·09
Eden.....	b	80	67	0·35

METEOROLOGY.

FEB. 14 1885

8 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·9s. E.

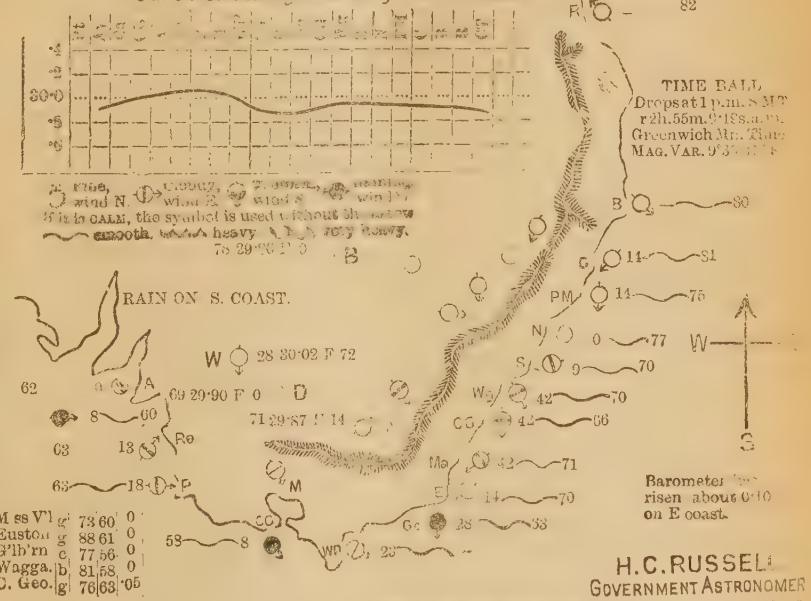
Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 5·52.
Total Rainfall from Jan. 1st to February 14 5·065
Barometers corrected to 32° Fa and Mean Sea Level

Curve showing state of Barometer.

Stations.	wt	M'x	Mn	R in
Casino ...	c	98	69	0·35
Tut'rfield	b	86	52	0
Clarence .	c	96	63	0
Moree....	b	92	57	0
Grafton ..	b	99	68	0
C'ln Inn's	b	87	66	0
Inverell ..	b	86	54	0
Bourke ..	l	91	61	0
Narrabri	b	90	58	0
Armidale	b	75	64	0
B'nden'r.	b	80	55	0
Gunned'h	b	87	60	0
C'hamble	b	—	—	0
Lismore..	b	96	72	1·03
Walcha ..	b	76	49	0
Tamw'rth	b	84	52	0
Coonab'n	b	86	47	0
P.M'cquie	b	76	60	0
W'kenaia	c	—	—	0
M'r'ndi	b	81	59	0
Tenterf. ..	b	82	59	0·01
Cassilis ..	b	80	63	0
Mus'wb'k	b	83	59	0
Dubbo. ..	b	85	53	0
Merandie.	c	90	61	0
Singleton	b	85	62	0
N'lsn's P.	c	78	57	0
Mudgee	b	83	51	0
Maitland.	b	85	60	0
Hill End.	b	—	—	0
N'wcastle	b	81	63	0
Orange ..	b	71	51	0
Bathurst	b	76	50	0
Forbes...	—	—	—	—
M.Vict'ria	b	—	57	0
Carcour..	b	72	51	0
Cond'l'n	—	—	—	—
Marsdens	—	—	—	—
Picton...	c	83	50	0
Sydney ..	g	80	69	0
Wentw'th	b	85	60	0
Young...	—	—	—	—
Wol'g'ng	c	80	59	0
Taralga...	b	85	58	0
Hay.....	b	81	60	0

Stations.	wt	M'x	Mn	R'in
Geaunbey'n	g	79	63	0
Deniliquin .	c	86	54	0
Moruya....	g	78	66	0
Kiandra...	g	74	48	0
Albury	b	86	59	0
Bodalla....	g	81	59	0
Cooma	g	73	48	0
Eden.....	c	74	69	0

M ss V'l	g	73	60	0
Euston	g	88	61	0
G'lb'rn	c	77	56	0
Wagga.	b	81	58	0
C. Geo.	g	76	63	·05



H.C.RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

FEB. 16

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 39·9s. E.

Average Annual Rainfall for 26 years .....t0·246.
Average for 24 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 16 5·065
Barometers corrected to 32° Fahr. and Mean Sea Level

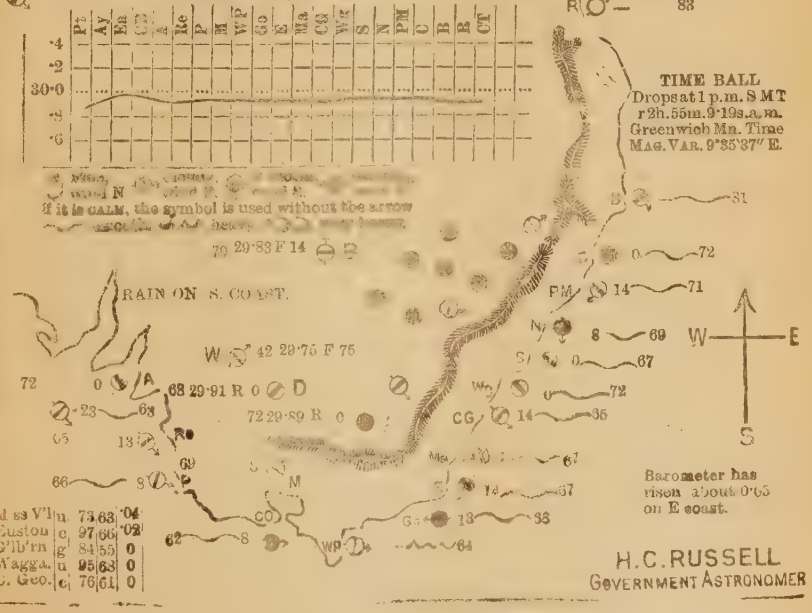
13 30·11S *Curve showing state of Barometer.*

If it is CALM, the symbol is used without the arrow

Stations.	wt	M'x	mn	R'in
Casino ...	u	86	71	0·05
T'nt'rfield	r	90	62	0·20
Clarence.	d	91	63	0
Moree....	d	95	70	0·13
Glen'en..	r	93	66	0·05
Gl'n Inn's	d	90	59	0·09
Inverell..	o	87	54	0
Bourke...	c	88	63	0·58
Narrabri	r	87	54	0·10
Armidale	r	76	74	0·05
B'dem'r.	p	88	54	0·05
Gunned'h	d	94	69	0
C'ranble	u	—	—	0·41
Lismore..	—	—	—	—
Walcha...	g	81	58	0·14
Tamw'rth	g	[illegible]	[illegible]	0·13
Cowra...	[illegible]	96	69	0·26
P.Macq'rie	d	81	73	0
Wellington	—	—	—	0
Mudgee..	r	82	59	[illegible]
Targ...	r	[illegible]	[illegible]	[illegible]
Cootamundra	r	[illegible]	[illegible]	[illegible]
Yass...	r	84	44	[illegible]
Braidwood	—	94	60	0·22
Merimbula	c	85	72	0
Sandy'ton	r	82	66	0·02
N'castle	g	74	62	0·20
Cessnock	r	93	58	0·13
Maitland.	p	85	66	0
Hin'land.	d	—	—	0
Newcastle.	r	73	66	0
Orange...	u	82	61	0
Bathurst.	g	87	62	0·05
Forbes...	p	104	54	0·20
M.Victoria	g	—	56	0
Carcoar...	u	77	52	0
Cond'bin	r	76	56	0·21
Marsden	—	—	—	—
Picton...	c	81	57	0
Sydney...	g	75	63	0
Wentworth	u	95	66	0
Young...	—	—	—	—
Wolf'g'ng	c	79	58	0
Taralga...	g	83	53	0
Hay.....	r	99	63	1·03

Stations.	wt	M'x	mn	R'in
Queanbey'n	g	79	59	0
Deniliquin.	g	96	59	0·83
Moruya....	g	79	63	2·72
Kiandra...	f	70	45	0
Albury	d	93	69	0·10
Bodalla....	g	84	57	0·08
Cooma	g	83	51	0
Eden.....	p	72	64	0·11

Mt. Vic'ria	g	73	63	·04
Euston	c	97	66	·02
G'lb'rn	g	84	55	0
Wagga..	u	95	63	0
C. Geo..	c	76	61	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 17 1885

Sydney Observatory.

Lat. 33° 51′ 42″ S.; Long. 10h. 4m. 30 Sec. E.

Average Annual Rainfall for 26 years ..... 0·243.
Average for 2 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 17 5·200
Barometers corrected to 32° Fah and reduced to Sea Level

AS 13 29·98 F 31

Curve showing state of Barometer.

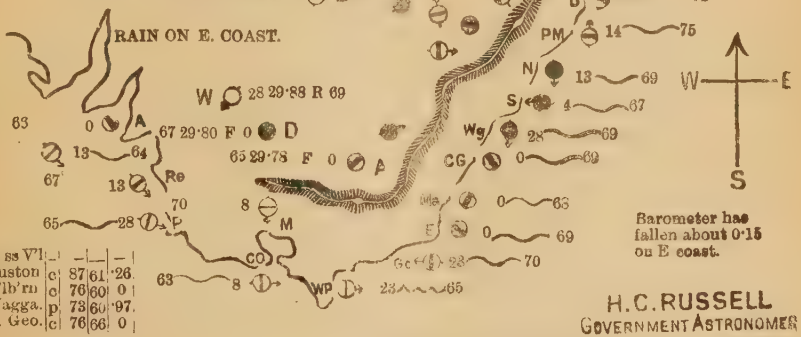
Fine, wind N. Cloudy, wind E. E. North, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy. very heavy.

77 29·75 F 14

Stations.	wt	M'x	mn	R'in
Casino ...	u	85	71	0·93
Tenterfield	u	71	65	0·40
Clarence..	u	90	64	0·20
Moree....	u	80	58	0·12
Grafton..	u	78	71	0·58
Gl'n Inn's	-	—	—	—
Inverell..	c	76	65	1·09
Bourke ..	b	86	67	0
Narrabri	p	86	54	0·84
Armidale	c	70	65	1·40
B'ndem'r.	u	76	53	2·82
Gunned'h	u	75	68	0·44
C'namble	u	—	—	0
Lismore..	c	85	54	0·49
Walcha ..	u	67	61	1·91
Tamw'rth	c	75	66	1·06
Coonab'n	g	79	61	0·03
P.M'eqrie	u	76	67	3·64
W'lcannia	b	—	—	0
M'rr'rndi	g	69	61	0·32
Taree....	c	80	67	1·60
Cassilis ..	g	69	66	0·20
M'ss'lbr'k	g	83	65	0·39
Dubbo. ..	q	81	63	0·15
Menindie.	b	85	68	0·23
Singleton	c	71	66	0·45
N'ls'n sB	r	73	63	0·75
8 75 Mud.	u	75	58	0
Maitland.	r	85	67	0·42
Hill End.	u	—	—	0·10
N'wcastle	r	72	65	0·66
Orange ..	c	69	58	0·13
Bathurst	g	71	59	0·05
Forbes...	g	86	49	0·95
M.V'ct'ria	g	—	57	0
Carcoar..	g	68	49	0·10
Cond'b'l'n	u	70	55	0·89
Marsdens	g	75	69	0·61
Picton. ..	o	79	63	0·01
Sydney ..	d	73	66	0·14
Wentw'th	c	94	63	1·28
Young. ..	p	73	61	0·60
Woll'g'ng	r	80	62	0·01
Taralga ..	c	74	56	0
Hay	u	85	63	0·25

Stations.	wt	M'x	mn	R'in
Queanbey'n	r	74	65	0
Deniliquin.	r	84	61	0·12
Moruya....	u	77	65	0·04
Kiandra...	g	61	47	0·92
Albury	u	73	65	1·00
Bodalla....	g	77	63	0·07
Cooma	g	82	51	0
Eden.....	u	75	68	0·12

M ss V'l — — — —
Euston c 87 61 ·26.
G'lb'rn c 76 60 0
Wagga. p 73 60 ·97.
C. Geo. c 76 66 0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 18 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 59·8*s.* *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 18 5·225
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

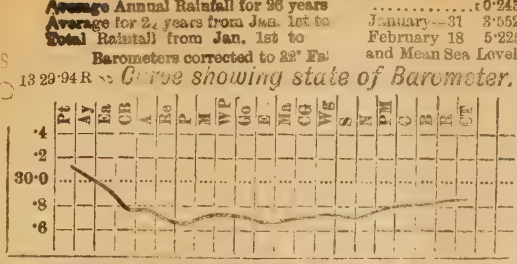
Stations.	wt	m'x	min	R'fall
Casino...	c	80	71	1·00
Tut'rfield	c	82	59	0·02
Clarence.	n	84	60	0·20
Moree....	c	[illegible]	62	0·01
Grafton..	g	83	70	0·08
Gl'n Innes	c	7[illegible]	63	0·10
Inverell..	b	66	[illegible]	[illegible]
Bourke ..	b	[illegible]	[illegible]	[illegible]
Narrabri	c	90	58	[illegible]
Armidale.	c	72	66	0·[illegible]
Sydney'r.	b	77	[illegible]	[illegible]
Bunnel'h	c	90	69	0
Chamble	b	—	—	0
Lismore .	c	86	75	0·06
Walcha..	g	75	[illegible]	0·21
Tamw'rth	c	85	6[illegible]	0·13
Cootam'n	b	83	5[illegible]	0
P.M'cquarie	u	82	71	0·12
W'kamaia	c	—	—	0
M'rr'r'ndi	c	82	68	0
Taree....	g	[illegible]	7[illegible]	0·21
Cassilis ..	c	80	66	0
M'ss'lbr'k	b	84	67	0
Dubbo...	b	86	62	0·43
Menindie.	b	87	68	0
Singleton	b	85	66	0·20
N'l's'n s H.	g	82	67	0·05
23 70 Mud.	b	89	56	0·10
Maitland.	b	85	70	0·10
Hill End.	b	—	—	0
N'wcastle	c	76	69	0·05
Orange...	c	76	55	0
Bathurst	b	81	55	0
Forb's...	b	70	57	0·76
M.V'ct'ria	b	—	60	0
Carcoar..	b	75	68	0
Cond'l'F'n	b	74	55	0
Marsdens	b	85	69	0
Picton...	c	82	65	0·41
Sydney...	g	76	67	0·03
Went'wth.	b	88	65	0
Young...	b	82	58	0·03
Wol'g'ng	b	81	60	0·15
Taralga...	b	86	54	0·70
Hay.....	—	—	—	—

Stations.	wt	M'x	Mn	R'fall
Queanbey'n	u	76	64	0·27
Deniliquin.	b	82	58	0·14
Mornya....	c	79	64	0·05
Kiandra...	g	61	46	1·02
Albury....	u	73	64	0·19
Bodalla....	b	83	50	0
Cooma....	c	83	52	0
Eden.....	c	75	67	0·05

M ss V'l	b	75	62	·13
Euston	b	87	65	·09
G'lb'rn	b	84	57	·14
Wagga.	u	78	61	·12
C. Geo.	c	74	64	·56

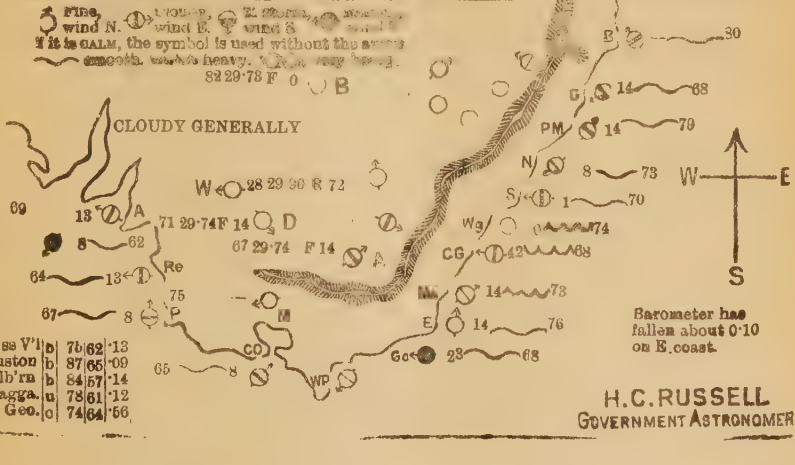
13 29·94 R

Curve showing state of Barometer.



Fine, wind N. [illegible] wind E. [illegible] wind S. [illegible]
If it is CALM, the symbol is used without the arrow [illegible] smooth. [illegible] heavy. [illegible]

82 29·78 F 0



TIME BALL
Drops at 1 p.m. S M T
[illegible]h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has fallen about 0·10 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 19 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 19 5·227
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	b	91	63	0·09
T'nt'rfield	b	85	59	0
Clarence.	b	85	63	0
Moree....	b	91	67	0·29
Grafton..	b	89	69	0
Gl'n Inn's	b	82	59	0
Inverell..	b	81	61	0
Bourke ..	b	98	70	0
Narrabri	b	94	57	0
Armidalc	b	74	67	0
B'ndem'r.	b	78	47	0
Gunned'h	b	92	67	0
C'namble	b	—	—	0
Lismore..	b	91	68	0·44
Walcha..	b	79	59	0
Tamw'rth	b	89	62	0·03
Coonab'n	b	92	57	0
P.M'cqrie	b	82	68	0
W'lcannia	b	—	—	0
M'rr'rndi	b	82	66	0
Taree....	b	89	74	0·01
Cassilis ..	b	84	67	0
M'ss'lbr'k	b	85	66	0
Dubbo. ...	b	93	61	0
Menindie.	b	94	73	0
Singleton	b	90	71	0
N'ls'n sB	b	88	66	0·05
18 71				
Mud.	b	91	55	0
Maitland.	b	90	70	0
Hill End.	b	—	—	0
N'wcastle	b	84	64	0
Orange ..	b	79	54	0
Bathurst	b	86	56	0
Forbes. ...	b	78	54	0
M. V'ct'ria	b	—	65	0
Carcoar..	b	77	65	0
Cond'b'l'n	c	80	60	0
Marsdens	b	83	71	0·02
Picton. ...	b	85	67	0·04
Sydney ..	b	80	69	0
Wentw'th	c	94	64	0
Young. ...	b	86	59	0·10
Woll'g'ng	b	83	62	0
Taralga..	b	87	58	0
Hay	c	91	65	0

Stations.	wt	M'x	Mn	R'in
Qeanbey'n	b	68	62	0
Deniliquin.	b	92	58	0
Moruya....	c	80	63	0
Kiandra...	fg	63	45	0·30
Albury	b	83	65	0·12
Bodalla....	b	88	59	0·26
Cooma	c	85	52	0
Eden	b	79	65	0·07

M ss V'l	b	80	62	0
Euston	c	96	62	0
G'lb'rn	b	84	57	0
Wagga.	b	89	63	0
C. Geo.	b	75	66	0

AS 0 30·01 R 7

Curve showing state of Barometer.

Pt AY Ba CB A Be P M WP Go E Ma CG Ws S N PM C B R CT

·4 ·2 30·0 ·8 ·6

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

87 29·77 R 0 B

FINE GENERALLY

W 42 29·88 F 70

68 18 A 71 29·76 R 14 D

73 29·71 F 14

34 62 Re 64 23 76 63 34 P 13 M CO 65 8 WP

R 83 B 76 G 0 81 PM 0 81 N 8 83 S 3 78 Wg 14 80 CG 42 73 Ma 28 77 E 14 74 Gc 18 71

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has risen about 0·05 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 20 1925

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; Long. 151° [illegible] E.

Average Annual Rainfall [illegible] 0·243.

Average for 2[illegible] years from [illegible] 3·552.

Total Rainfall from Jan. [illegible] 0·227

Barometers corrected [illegible]

Stations.	wt	M'x	Mn	R'in
Casino ...	b	96	71	0
T'nt'rfield	b	88	60	0
Clarence.	b	91	63	0
Moree....	b	97	59	0
Grafton ..	b	97	72	0
Gl'n Inn's	b	91	59	0
Inverell..	b	84	64	0
Bourke ...	b	107	72	0
Narrabri	b	95	57	0
Armidale	b	77	69	0
Eden'm'r.	b	79	49	0
Gunned'h	b	96	73	0
C'ramble	b	—	—	0
L'more..	c	96	74	0
Wel'ma ..	c	83	58	0
Dunw'rth	c	92	66	0
[illegible]	b	93	57	0
[illegible]	c	88	[illegible]	0
[illegible]	b	—	—	[illegible]
[illegible]	b	87	[illegible]	0
[illegible]	g	[illegible]	[illegible]	0·01
[illegible]	b	87	[illegible]	0
[illegible]	b	93	71	0
[illegible]	b	98	61	0
[illegible]	b	80	63	0
[illegible]	b	95	73	0
[illegible]	c	89	71	0
[illegible]				
C. Mud	b	97	56	0
Maitland.	b	95	72	0
Port End.	b	—	—	0
Newcastle	b	89	72	0
[illegible]	b	82	57	0·18
[illegible]	c	92	57	0
[illegible]	b	92	67	0
[illegible]	c	—	65	0·20
Cootamundra	b	80	64	0
[illegible]	b	75	58	0
Marsdens	b	92	72	0·10
[illegible]	u	88	61	0
[illegible]	b	90	70	0
Wagga	b	97	56	0
Yass	b	91	50	0
[illegible]	c	87	62	0
Tumut	b	87	54	0·10
Mar[illegible]	b	88	57	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	86	64	0
Deniliquin.	b	83	52	0
Moruya....	c	90	69	0·08
Kiandra...	b	74	50	0
Albury	b	93	61	0
Bodalla....	g	98	65	0
Cooma	g	92	[illegible]	0·37
Eden.....	b	82	60	0·[illegible]

METEOROLOGY.

9 A.M. FEB. 21 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

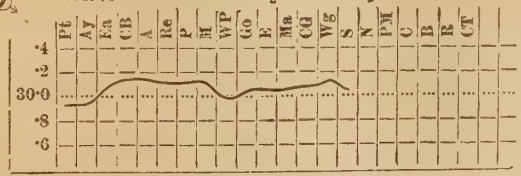
Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January—31 3·52.
Total Rainfall from Jan. 1st to February 21 5·513
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	
Clarence.	–	—	—	—
Moree....	–	—	—	—
Grafton...	–	—	—	—
Gl'n Inn's	–	—	—	—
Inverell..	–	—	—	—
Bourke ..	b	104	67	0
Narrabri	–	—	—	—
Armidale	–	—	—	—
B'ndem'r.	–	—	—	—
Gunned'h	–	—	—	—
C'hamble	–	—	—	—
Lismore..	–	—	—	—
Walcha ..	–	—	—	—
Tamw'rth	–	—	—	—
Coonab'n	b	99	60	0
P.M'cqrie	–	—	—	—
W'lcannia	–	—	—	—
M'rr'r'ndi	–	—	—	—
Taree....	–	—	—	—
Cassilis ..	b	90	69	0
M'ss'lbr'k	–	—	—	—
Dubbo. ...	–	—	—	—
Menindie.	b	82	66	0
Singleton	–	—	—	—
N'ls'n s P.	–	—	—	—
8 76				
Mudg	g	98	59	0
Maitland.	–	—	—	—
Hill End.	–	—	—	—
N'wcastle	–	—	—	—
Orange ..	b	81	54	0
Bathurst	b	89	54	0
Forbes...	b	92	60	0
M. V'ct'ria	g	—	57	0·20
Carcoar..	b	80	58	0
Cond'b'l'n	b	71	51.	0
Marsdens	b	85	63	0
Picton. ..	d	86	64	0·01
Sydney ..	g	92	68	0·29
Wentw'th	b	84	59	0
Young. ..	b	95	51	0
Woll'g'ng	c	87	65	0
Taralga..	g	86	56	0
Hay	b	81	58	0

Stations.	Wt	M'x	Mn	R'in
Qeaunbey'n	b	82	56	0
Deniliquin .	b	84	53	0
Moruya....	g	78	63	0
Kiandra...	b	74	33	0
Albury	b	82	51	0
Bodalla....	b	80	58	0
Cooma	c	83	52	0
Eden.....	c	76	65	0

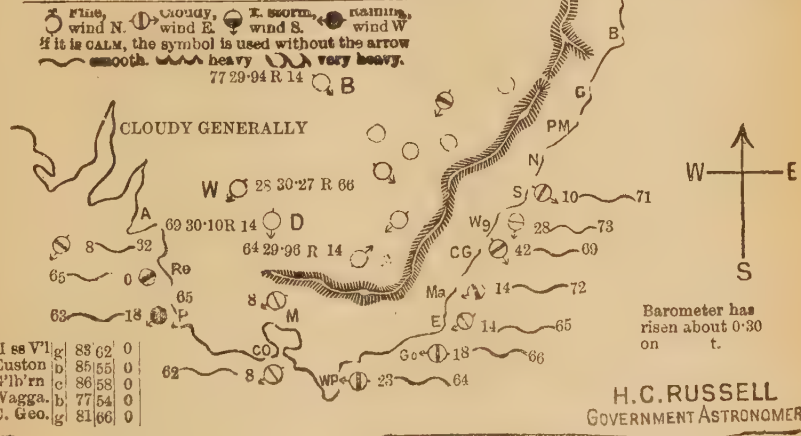
AS
13 30·16 R 75

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.

77 29·94 R 14 B



M ss V'l	g	83	62	0
Euston	b	85	55	0
G'lb'rn	c	86	58	0
Wagga.	b	77	54	0
C. Geo.	g	81	66	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 a.m. FEB. 23 1885

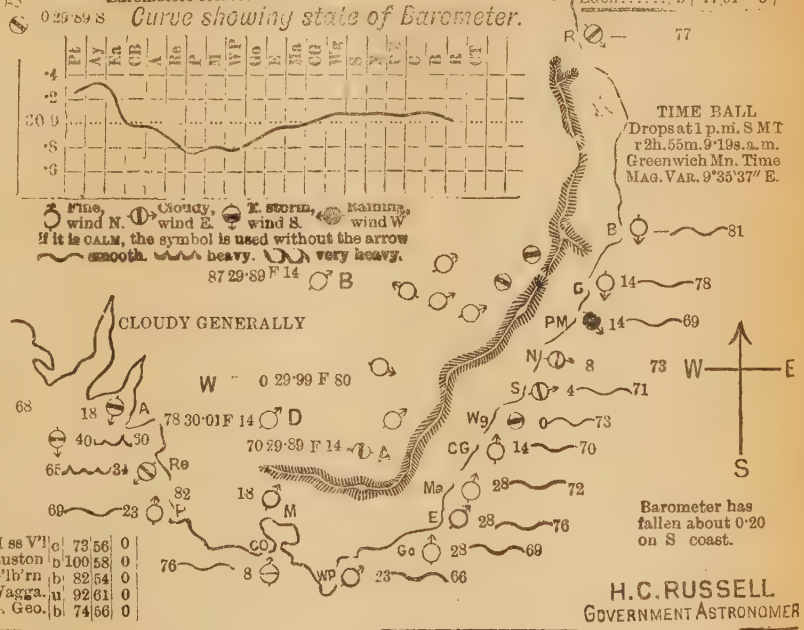
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 2[illegible] years from Jan. 1st to January 31 3·552.
Total Rainfall from Jan. 1st to February 23 5·513
Barometers corrected to 32° Fahr. and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	87 68	0	0·08
T'nt'rfield	c	89 61		0
Clarence..	b	86 64	0	0·34
Morec....	b	97 70		0
Grafton..	b	91 71		0
Gl'n Inn's		—	—	—
Inverell..		—	—	—
Bourke ..	b	107 74		0
Narrabri	b	101 63		0
Armidale	b	78 69		0
E'nderm'r.		—	—	—
Gunned'h	c	99 69		0
C'namble	b	—	—	0
Lismore..		—	—	—
Walcha..	b	80 63		0
Tamw'rth	b	92 66		0
Coonab'n	b	100 59		0
P.M'cqrie	p	89 69	0	0·24
W'lcannia	b	—	—	0
M'rr'r'ndi	g	82 65		0
Taree....	g	79 66	0	0·30
Cassilis ..	g	75 70		0
M'ss'lbr'k	c	83 75		0
Dubbo. ...	t	95 65		0
Meniindie.	b	91 70		0
Singleton	c	80 66		0
N'le's'n s B	g	76 63	0	0·95
28 65				
Mudg	g	96 57		0
Maitland.	u	82 65	0	0·03
Hill End.	u	—	—	0
N'wcastle	g	76 69		0
Orange ..	–	—	—	—
Bathurst	c	92 54		0
Forbes...	–	—	—	—
M.V'ct'ria	c	—	60	0·06
Carcoar..	b	80 61		0
Cond'b'l'n	–	—	—	—
Marsdens	c	92 71	0	0·03
Picton...	o	78 56		0
Sydney ..	b	76 64		0
Wentw'th	b	99 65		0
Young...	c	93 61		0
Woll'g'ng	c	81 68		0
Taralga..	b	86 50		0
Hay	b	96 61		0
M ss V'l	c	73	56	0
Euston	b	100	58	0
G'lb'rn	b	82	54	0
Wagga.	u	92	61	0
C. Geo.	b	74	56	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	78	60	0
Deniliquin.	b	98	52	0
Moruya....	b	79	58	0
Kiandra...	–	—	—	—
Albury	q	91	61	0
Bodalla....	b	86	50	0·17
Cooma	g	84	49	0
Eden.....	b	77	64	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. FEB. 24 1895

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 39·8s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 24 years from Jan. 1st to January—31 3·352.
Total Rainfall from Jan. 1st to February 24 5·513
Barometers corrected to 32° Fa' and Mean Sea Level

AS 0 30·12 F 80 *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.

77 29·90 R 0 B

CLOUDY GENERALLY

W 42 30·16 R 57

A 59 30·01 S 14 D

60 29·94 R 14

8 30 Re 57 18 59 58 23 P 18 M CO 55 S WP 40 57 Go Ma 28 71 E 28 60 CG 42 68 Wg 28 72 S 17 72 N 8 74 PM 0 74 C 14 77 B 80 R 78

TIME BALL
Drops at 1 p.m. S.M.T.
or 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·20 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R in
Casino ...	b	92	64	0
T'nt'rfield	u	89	61	0
Clarence .	c	88	64	0
Moree....	u	94	67	0·82
Grafton ..	c	94	66	0
Gl'n Inn's	—	—	—	—
Inverell ..	—	—	—	—
Bourke ..	b	110	68	0·08
Narrabri	u	86	57	0·33
Armidale	r	77	70	0·26
B'ndem'r.	p	87	50	0·58
Gunned'h	u	97	66	0·86
C'namble	b	—	—	—
Lismore..	b	89	68	0
Walcha...	u	79	62	0·81
Tamw'rth	c	93	65	0·05
Coonab'n	g	94	62	0
P.M'cqrie	g	82	69	0·84
W'lcannia	b	—	—	0
M'rr'r'ndi	u	84	68	0
Taree....	g	84	68	0·01
Cassilis ..	g	81	67	0·18
M'ss'lbr'k	c	84	71	0
Dubbo...	c	91	60	2·30
Menindie.	b	99	62	0
Singleton	c	85	71	0
N'ls'n sE	g	82	69	0
13 68 Mudg	g	81	56	0
Maitland.	g	85	70	0
Hill End.	u	—	—	0·48
N'wcastle	g	78	70	0
Orange ..	g	69	55	0·64
Bathurst	c	79	54	0·22
Forbes...	g	82	56	0·08
M.V'ct'ria	b	—	60	0
Carcoar..	b	75	61	0·13
Cond'b'l'n	u	71	53	1·21
Marsdens	b	88	71	0·01
Picton...	c	89	62	0·01
Sydney ..	g	77	68	0
Wentw'th	b	99	50	0
Young...	u	85	61	0
Woll'g'ng	b	81	63	0
Taralga..	b	85	58	0
Ilay.....	b	101	53	0

Stations.	wt	M'x	Mn	R in
Queanbey'n	c	81	63	0·10
Deniliquin.	b	101	45	0
Moruya....	r	76	64	0
Kiandra...	—	—	—	—
Albury	b	92	54	0·48
Bodalla....	g	81	61	0
Cooma	b	92	54	0·12
Eden.....	g	76	60	0

M ss V'll	c	78	62	0
Euston	b	103	47	0
G'lb'rn	g	91	58	0
Wagga.	b	96	56	86
C. Geo.	c	73	65	0

METEOROLOGY.

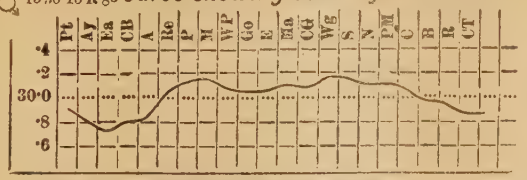
9 A.M. FEB. 25 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 55·8s. E.

Average Annual Rainfall for 26 years .....0·243.
Average for 2½ years from Jan. 1st to January—31 3·52.
Total Rainfall from Jan. 1st to February 25 5·530
Barometers corrected to 32° Fah and Mean Sea Level

AS 13 30·10 R 85 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

81 30·00 R 0 B

CLOUDY GENERALLY

W 34 30·17 R 65

58 30·24R 14 D

62 29·99 R 14

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·20 on E coast.

H.C. RUSSELL.
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino...	c	93	65	1·40
T'nt'rfield	c	77	57	0
Clarence..	c	87	62	0·14
Moree....	b	85	66	0
Grafton..	c	86	64	0·05
Gl'n Inn's	c	80	55	0·21
Inverell..	b	77	63	0·20
Bourke...	b	100	64	0·54
Narrabri	b	92	59	0
Armidale	b	71	64	0·12
B'ndem'r.	b	78	44	0
Gunned'h	b	89	66	0
C'mamble	b	—	—	0
Lismore..	u	89	68	1·80
Walcha...	c	68	54	0·08
Tamw'rth	—	—	—	—
Coonab'n	b	88	56	0·07
P.M'cqrie	g	81	65	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	83	69	0
Taree....	b	82	67	0
Cassilis..	c	82	66	0·12
M'ss'lbr'k	c	85	71	0
Dubbo...	b	90	63	0
Menindie.	b	81	60	0
Singleton	c	89	70	0
N'ls'n sB	g	85	64	0
34 88				
Mudg	c	91	57	0
Maitland.	p	88	72	0
Hill End.	b	—	—	0
N'wcastle	g	79	69	0
Orange..	g	77	58	0
Bathurst	b	87	59	0
Forbes...	b	88	58	0
M.V'ct'ria	fg	—	60	0
Carcoar..	b	77	64	0
Cond'b'l'n	b	74	54	0
M'rsdens	b	85	66	0
Victon...	g	79	63	0
Sydney..	g	77	66	0·02
W'ntw'th	b	80	53	0
Young...	c	81	44	0
Wolf'p'ng	g	78	54	0
Tarago...	p	88	52	0
Hay.....	b	81	51	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	c	79	62	0
Deniliquin.	b	83	42	0
Moruya....	d	69	63	0·08
Kiandra...	—	—	—	—
Albury	b	82	50	0
Bodalla....	u	67	56	0·12
Cooma	b	83	52	0
Eden.....	p	67	59	0

R — 69

M ss V'l	u	75	60	·01
Euston	b	84	50	0
G'lb'rn	u	87	58	0
Wagga..	b	77	50	0
C. Geo.	c	72	62	0

METEOROLOGY.

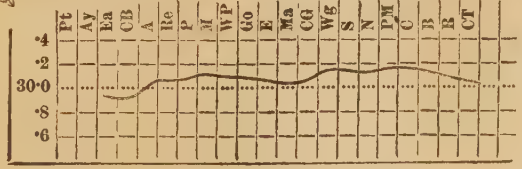
9 A.M. FEB. 26 1885

Sydney Observatory.

Lat. 33° 51′ 42″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....19·243.
Average for 2. years from Jan. 1st to January—31 3·52.
Total Rainfall from Jan. 1st to February 26 5·530
Barometers corrected to 32° Fa and Mean Sea Level

AS 13 30 06 R 59 *Curve showing state of Barometer.*



fine, wind N; cloudy, wind E; S. storm, wind S; rain, wind W

If it is CALM, the symbol is used without the arrow

smooth, heavy, very heavy.

83 30 05 R 14 B

FINE GENERALLY

W 28 30·16 F 71

69 30·09 F 14 D

69 30·02 R 14

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·10 on N E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in.
Qeaunbey'n	c	81	64	0
Deniliquin	b	86	46	0
Moruya	g	74	63	0·13
Kiandra	b	88	31	0
Albury	b	89	55	0
Bodalla	g	70	60	0·10
Cooma	b	89	48	0
Eden	u	67	60	0·01

R — 79

Stations.	wt	M'x	Mn	R'in.
Uralla	-	—	—	-
T'nt'rfield	-	—	—	-
Clarence	c	89	61	1·90
Moree	b	96	65	0
Grafton	c	88	64	0
Gl'n Inn's	b	82	55	0
Inverell	b	82	60	0
Bourke	b	104	71	0
Narrabri	b	93	60	0
Armidale	b	73	64	0
B'ndem'r	b	80	41	0
Gunned'h	b	90	63	0
C'namble	b	—	—	0
Lismore	-	—	—	—
Walcha	c	77	53	0·23
Tamw'rth	b	85	60	0
Coonab'n	b	91	59	0
P.M'cqrie	b	81	64	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	83	65	0
Taree	b	86	67	0
Cassilis	g	81	67	0
M'ss'lbr'k	g	84	70	0
Dubbo	b	94	67	0
Menindie	b	88	65	0
Singleton	c	84	71	0
N'is'n sB	b	86	66	0
13 67				
Mudg	b	91	56	0
Maitland	c	85	67	0
Hill End	b	—	—	0
N'wcastle	b	79	69	0·05
Orange	b	80	58	0
Bathurst	b	86	57	0·24
Forbes	b	90	57	0
M.V'ct'ria	b	—	63	0
Carcoar	b	78	64	0
Cond'b'l'n	b	78	54	0
Marsdens	b	91	71	0
Picton	c	77	65	0
Sydney	b	78	69	0
Wentw'th	c	95	57	0
Young	b	95	61	0
Wolf'g'ng	b	79	67	0
Taralga	b	90	54	0
Hay	b	88	53	0
M ss V'l	b	75	62	0
Euston	b	96	48	0
G'lb'rn	b	85	61	0
Wagga	b	91	59	0
C. Geo.	c	71	66	04

ROLOGICAL REPORT.

METEOROLOGY.

9 A.M. FEB. 27 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·81s. *E.*

Average Annual Rainfall for 26 years .....0·243.
Average for 2 years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 27 5·530
Barometers corrected to 32° Fa and Mean Sea Level

AS 13 30 01 R 88 *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

83 29 97 F 28 B

FINE GENERALLY

W 14 30·04 F 87

76 0 A 76 30·00F 14 D

74 29·92 F 0 A

23 56

62 13 Re

83

67 8 P M

63 8 CO

23 66 WP

Go 28 70

E 14 71

Ma 14 72

CG 28 73

Wg 0 75

S 4 78

N 8 75

PM 0 77

C 14 73

B 72

R 73

TIME BALL
Drops at 1 p.m. S MT
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W — E
S

Barometer has fallen about 0·15 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	m'x	mn	R'in
Casino	b	84	65	0·40
Tent'rfield	u	79	60	0·20
Clarence .	c	85	62	0·01
Moree....	b	97	65	0
Grafton ..	b	87	61	0·24
Gl'n Inn's	u	78	59	0
Inverell ..	b	82	58	0
Bourke ..	b	103	70	0
Narrabri	b	90	55	0
Armidale	b	74	64	0
B'ndem'r.	b	79	42	0
Gunned'h	-	—	—	—
C'namble	b	—	—	0
Lismore..	p	83	69	0·74
Walcha ..	b	76	51	0
Tamw'rth	b	92	60	0
Coonab'n	b	92	57	0
P.M'cqrie	b	82	63	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	86	62	0
Taree....	b	86	60	0
Cassilis ..	b	83	65	0
M'ss'lbr'k	b	86	68	0
Dubbo. ..	b	96	65	0
Menindie.	b	96	65	0
Singleton	b	92	64	0
N'ls'n s P.	c	85	64	0
Mudg	b	95	58	0
Maitland.	b	87	65	0
Hill End.	b	—	—	0
N'wcastle	b	77	61	0
Orange ..	b	83	58	0
Bathurst	b	91	57	0
Forbes. ..	b	89	56	0
M. V'ct'ria	b	—	62	0
Carcoar..	b	82	65	0
Cond'b'l'n	b	80	54	0
Marsdens	b	94	73	0
Picton. ..	b	86	59	0
Sydney ..	b	80	70	0
Wentw'th	c	106	67	0
Young. ..	b	97	66	0
Well'g'ng	b	84	62	0
Taralga..	b	95	65	0
Hay.....	b	97	31	0

Stations.	wt	m'x	mn	R'in
Qeaunbey'n	b	87	67	0
Deniliquin.	b	99	52	0
Moruya....	u	80	69	0·01
Kiandra...	c	83	43	0
Albury	b	96	64	0
Bodella....	g	83	64	0
Cooma	g	95	48	0
Eden.....	u	75	67	0

M ss V'l	—	—	—	—
Euston	g	102	69	0
G'lb'rn	b	91	62	0
Wagga.	b	99	64	0
C. Geo.	c	75	66	0

METEOROLOGY.

9 A.M. FEB. 28 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

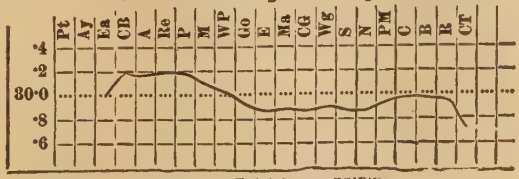
Average Annual Rainfall for 26 years .....: 0·243.
Average for 2: years from Jan. 1st to January—31 3·552.
Total Rainfall from Jan. 1st to February 28 5·530
Barometers corrected to 32° Fa' and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	87	61	0
T'nt'rfield	b	80	56	0
Clarence.	b	91	61	0
Moree....	b	98	68	0
Grafton..	b	89	62	0
Gl'n Inn's	b	89	53	0
Inverell..	b	83	68	0
Bourke ..	c	105	72	0
Narrabri	b	—	—	—
Armidale	b	75	65	0
B'ndem'r.	b	86	44	0
Gunned'h	b	93	67	0
C'namble	b	—	—	0
Lismore..	b	89	67	0·02
Walcha..	b	81	55	0
Tamw'rth	b	92	59	0
Coonab'n	b	96	62	0
P.M'cqrie	b	86	67	0
W'lcannia	u	—	—	0
M'rr'r'ndi	b	87	69	0
Taree....	b	87	60	0
Cassilis ..	b	85	65	0
M'ss'lbr'k	b	89	70	0
Dubbo. ..	b	99	66	0
Menindie.	b	—	—	—
Singleton	b	92	70	0
N'ls'n s B	b	83	67	0
Mudg	b	96	55	0
Maitland.	b	88	68	0
Hill End.	b	—	—	0
N'wcastle	b	82	69	0
Orange ..	c	84	59	0
Bathurst	c	93	59	0
Forbes...	b	—	—	—
M.V'ct'ria	b	—	69	0
Carcoar..	g	84	64	0
Cond'b'l'n	b	—	—	—
Marsdens	g	96	71	0
Picton. ..	c	88	60	0
Sydney ..	b	82	69	0
Wentw'th	b	—	—	—
Young. ..	g	97	67	0
Woll'g'ng	g	83	67	0
Taralga..	b	96	58	0
Hay	u	105	61	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	g	88	66	0
Deniliquin.	r	105	54	0·05
Moruya....	g	81	66	0
Kiandra...	r	83	43	0
Albury	u	98	71	0·01
Bodalla....	g	85	60	0
Cooma	r	95	52	0·04
Eden.....	r	76	62	0·01

M ss V'l c 84 63 0
Euston r 104 57 ·30
G'lb'rn c 94 62 0
Wagga. u 102 71 0
C. Geo. c 78 67 0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. A storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

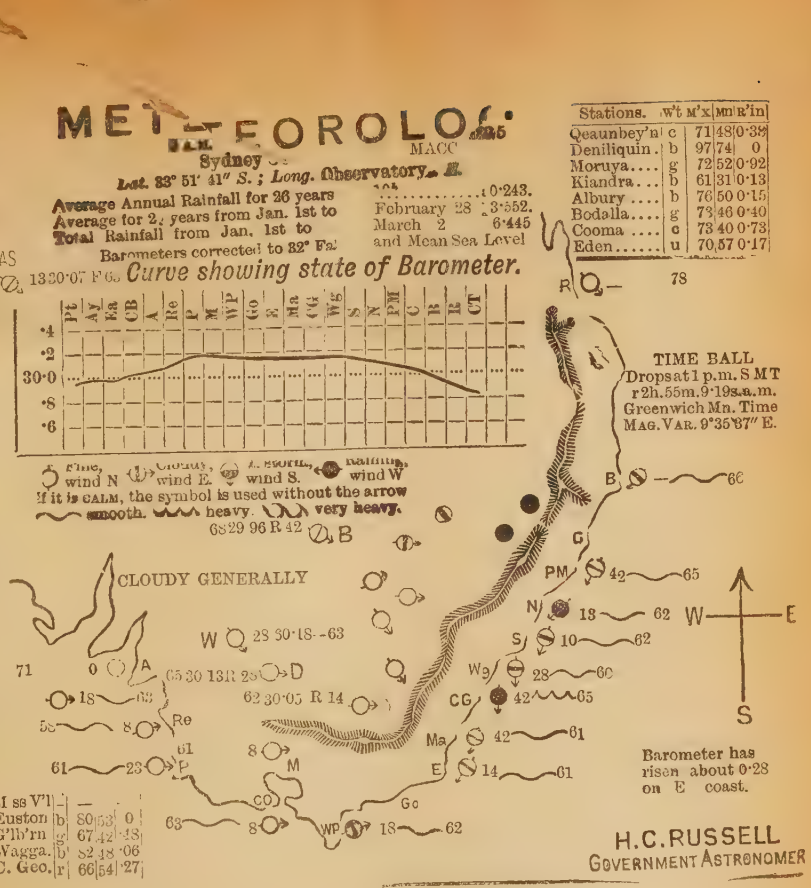
H. C. RUSSELL
GOVERNMENT ASTRONOMER

Meteorological Report, 7 A.M.

Generally fine and ... Barometers ... cloudy, at ... weather ge...

Stations.	wt	M'x	m	R'in
Casino ...	r	80	59	0·5
T'nt'rfield	r	90	55	1·60
Clarence .	–	—	—	—
Moree....	u	74	63	0·43
Grafton ..	–	—	—	—
Gl'n Inn's	u	89	58	1·15
Inverell...	c	85	60	1·00
Bourke ..	c	74	64	0·01
Narrabri	u	90	54	0·16
Armidale	–	—	—	—
B'ndem r.	u	60	41	0·83
Gunned'h	g	69	59	0·75
C'namble	b	–	–	0
Lismore..	–	—	—	—
Walcha ..	u	72	44	0·97
Tamw'rth	c	79	54	1·22
Coonab'n	c	66	51	0·54
P.M'cqrie	c	69	59	0·83
W'leannia	c	—	—	0
M'rr'ndi	o	80	59	0·73
Taree.....	c	70	66	0·24
Cassilis ..	b	64	46	0·37
M'ss'lbr'k	b	68	58	0·54
Dubbo. ..	b	70	51	0·04
Menindie.	c	77	59	0·05
Singleton	c	67	56	0·65
N'ls'n s P.	–	—	—	—
Mudg	b	91	45	0·18
Maitland.	u	66	56	0·51
Hill End.	b	—	—	0
N'weastle	p	67	58	0·18
Orange ..	c	64	44	0
Bathurst	c	86	45	0·35
Forbes...	b	78	43	0·07
M. V'ct'ria	u	—	47	0·68
Carcoar..	b	80	64	0·25
Cond'b'l'n	b	66	49	0
Marsdens	b	80	59	0·01
Picton. ..	g	62	55	0·18
Sydney ..	g	66	57	0·92
Wentw'th	b	79	54	0·01
Young. ..	b	77	48	0
Well'g'ng	g	72	55	0·99
Tarralga..	u	88	40	0·45
Hay	b	81	49	0

Stations.	wt	M'x	m	R'in
Qeaunbey'n	c	71	48	0·39
Deniliquin .	b	97	74	0
Moruya....	g	72	52	0·92
Kiandra...	b	61	31	0·13
Albury	b	76	50	0·15
Bodalla....	g	73	46	0·40
Cooma	c	73	40	0·73
Eden.....	u	70	57	0·17



METEOROLOGY.

MARCH 3 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·61*s.* *E.*

Average Annual Rainfall for 26 years ..... 0·243.
Average for 2[illegible] years from Jan. 1st to February 28 3·[illegible]52.
Total Rainfall from Jan. 1st to March 3 6·503
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

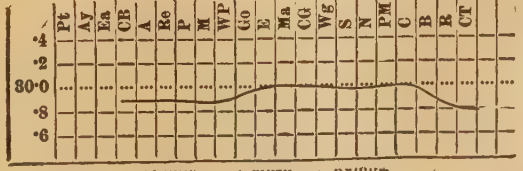
Stations.	Wt	M'x	Mn	R'in
Casino ...	–	—	—	—
T'nt'rfield	b	69	51	0·15
Clarence .	–	—	—	—
Moree....	g	84	61	0
Grafton...	–	—	—	—
Gl'n Inn's	b	76	49	0
Inverell..	b	77	60	0
Bourke ...	u	89	64	0
Narrabri	g	92	6[illegible]	0
Armidale	–	—	—	—
B'ndem'r.	b	63	38	0
Gunned'h	b	78	59	0
C'namble	c	—	—	0
Lismore..	–	—	—	—
Walcha ..	b	62	43	0
Tamw'rth	–	—	—	—
Coonab'n	g	79	53	0
P.M'cqrie	c	75	60	0·03
W'lcannia	–	—	—	—
M'rr'r'ndi	b	70	54	0
Taree....	b	75	63	0·01
Cassilis ..	b	68	36	0
M'ss'lbr'k	b	73	62	0
Dubbo. ..	b	82	57	0
Menindie.	u	83	69	0
Singleton	b	74	61	9
N'ls'n s P.	b	80	61	0·10
Mudg	b	94	46	0
Ma tland.	b	73	60	0
Hill End .	b	—	—	0
N'wcastle	b	72	60	0
Orange ..	–	—	—	—
Bathurst	b	70	49	0
Forbes...	–	—	—	—
M. V'ct'ria	b	—	53	0
Carcoar..	b	67	54	0
Cond'b'l'n	–	—	—	—
Marsdens	–	—	—	—
Picton...	b	69	56	0
Sydney ..	c	70	60	0·06
Wentw'th	u	91	63	0
Young. ..	–	—	—	—
Woll'g'ng	b	73	58	0
Taralga..	–	—	—	—
Hay	–	—	—	—

Stations.	Wt	M'x	Mn	R'in
M ss V'l'u	—	51	[illegible]	·12
Euston	g	93	62	0
G'lb'rn	g	66	46	0
Wagga.	b	79	55	0
C. Geo.	b	68	57	0

Stations.	Wt	M'x	Mn	R'in
Qeatunbey'n	7	—	–	—
Deniliquin .	b	83	52	0
Moruya....	g	79	39	0
Kiandra...	b	56	32	0
Albury	b	79	52	0
Bodalla....	–	—	—	—
Cooma	b	72	43	0
Eden.....	b	69	58	0

AS

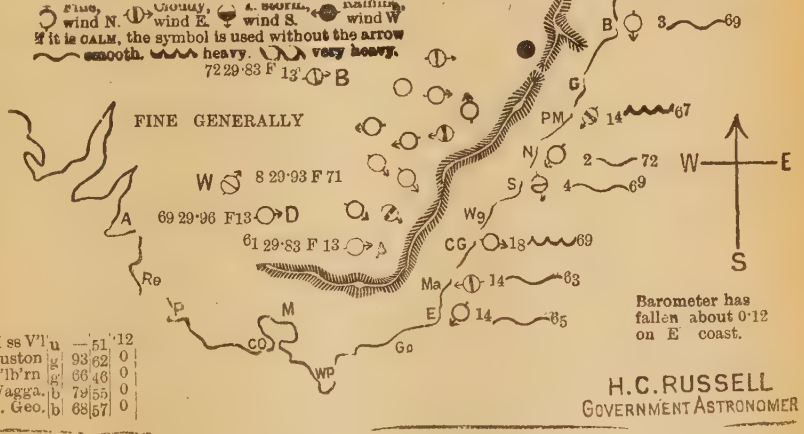
Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. [illegible] wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 4 1885

Sydney Observatory.

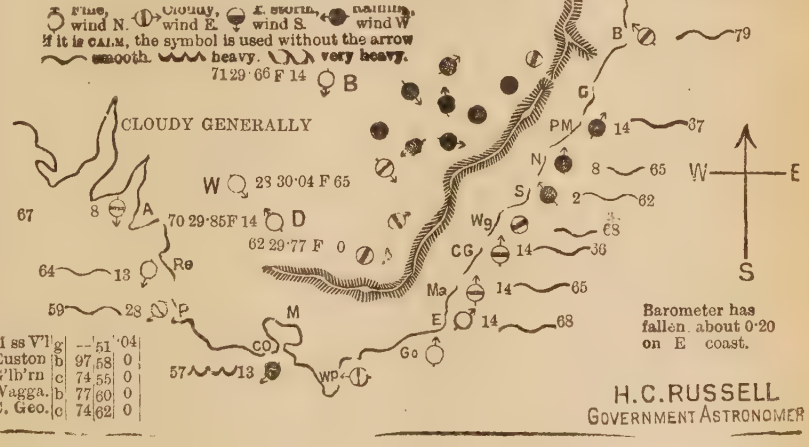
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 4 6·692
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	g	83	44	0
T'nt'rfield	r	82	58	0·21
Clarence .	–	--	—	—
Moree....	r	80	64	0·72
Grafton ..	–	—	—	—
Gl'n Inn's	r	84	54	0·28
Inverell..	r	78	60	0·31
Bourke ..	c	75	69	0·62
Narrabri	r	90	51	0·64
Armidale	u	67	58	0·15
B'ndem'r.	p	77	48	0·71
Gunned'h	r	82	65	0·40
C'namble	r	–	—	0·30
Lismore..	–	—	—	—
Walcha ..	f	71	52	0 29
Tamw'rth	–	—	—	—
Coonab'n	r	82	51	1·48
P.M'cqrie	p	78	65	0·26
W'lcannia	u	—	—	0
M'rr'r'ndi	r	75	60	1·04
Taree....	r	79	64	0·26
Cassilis ..	r	74	61	0·98
M'ss'lbr'k	r	73	63	1·09
Dubbo...	r	87	60	0·75
Menindie.	u	92	62	0
Singleton	r	72	65	0·62
N'ls'n sE	r	82	60	0·24
8 67 Mudg	r	86	56	0·92
Ma tland.	r	78	63	0·33
Hill End.	r	—	—	0·82
N'wcastle	r	78	60	0·17
Orange ..	r	72	53	0·40
Bathurst	r	78	56	0·34
Forbes...	c	91	64	0
M.V'ct'ria	r	—	51	0·38
Carcoar..	g	68	59	0·22
Cond'b'l'n	r	65	50	0·43
Marsdens	c	80	63	0·07
Picton...	d	75	60	0·11
Sydney ..	d	71	62	0·19
Wentw'th	b	93	60	0
Young....	u	83	59	0·03
Woll'g'ng	c	75	62	0
Taralga..	u	73	52	0
Hay.....	–	—	—	—
M ss V'l'	g	--	51	·04
Euston	b	97	58	0
G'lb'rn	c	74	55	0
Wagga.	b	77	60	0
C. Geo.	c	74	62	0

Stations.	w't	M'x	Mn	R'in
Qeaunbey'n	g	69	57	0
Deniliquin.	b	84	58	0
Moruya....	g	74	60	0
Kiandra...	g	65	30	0
Albury	u	79	60	0
Bodalla....	g	74	53	0
Cooma	g	73	51	0
Eden.....	c	69	60	0

Fine, wind N. Cloudy, wind E. Rain, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 5 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·3*s.* *E.*

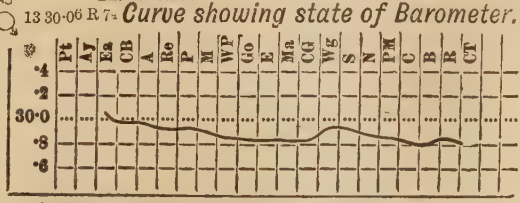
Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 5 6·867
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	u	82	66	0·03
T'nt'rfield	u	71	61	0·98
Clarence.	c	82	61	0
Moree....	c	78	64	0·22
Grafton..	o	86	59	0·01
Gl'n Inn's	g	70	59	0·30
Inverell..	u	77	60	0·35
Bourke ..	b	79	65	0
Narrabri	c	80	49	0
Armidalc	u	70	63	0·04
B'ndem'r.	u	77	46	0·80
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	c	80	69	0·02
Walcha..	g	69	58	0·30
Tamw'rth	b	75	58	0·30
Coonab'n	b	82	53	0·97
P.M'cqrie	u	79	65	0·04
W'lcannia	b	—	—	0
M'rr'r'ndi	g	70	59	0·75
Taree....	g	76	65	0·35
Cassilis ..	c	69	57	0·10
M'ss'lbr'k	d	74	62	0·19
Dubbo. ..	b	71	54	0
Menindie.	b	—	—	—
Singleton	u	72	64	0·10
N'ls'n sB	c	85	62	0·35
○ 0 69 Mudg	u	75	46	0
Ma tland.	u	75	62	0·10
Hill End.	b	—	—	0
N'wcastle	c	70	60	0·41
Orange ..	b	69	48	0·02
Bathurst	b	79	49	0
Forbes...	b	80	53	0
M. V'ct'ria	g	—	52	0·07
Carcoar..	b	68	53	0
Cond'b'l'n	b	61	44	0
Marsdens	b	82	63	0
Picton. ..	o	77	60	0
Sydney ..	g	70	62	0·08
Wentw'th	–	—	—	—
Young. ..	b	89	51	0
Woll'g'ng	g	77	62	0
Taralga..	r	79	46	0
Hay	b	86	50	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	c	76	59	0
Deniliquin.	–	—	—	—
Moruya....	g	76	60	0
Kiandra...	b	70	29	0
Albury	b	86	46	0
Bodalla....	g	83	56	0
Cooma	g	80	49	0
Eden.....	c	75	68	0·07

M ss V'l	u	—	49	·03
Euston	–	—	—	—
G'lb'rn	c	80	46	0
Wagga.	b	90	47	0
C. Geo.	c	69	61	0

AS ○ 13 30·06 R 7[illegible] *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

70 29·83 R 14 ○ B

69 ○ R

TIME BALL
Drops at 1 p.m. S MT
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

CLOUDY GENERALLY

W

D

60 29·85 R 0 ○ A

64 8 A 0 59 66 8 Re 58 56 13 P 8 M CO 58 8 WP 13 57 Go E 14 59 Ma 14 62 CG 28 63 Wg 28 65 S 7 66 N 13 70 PM 42 75 C 42 75 B 80

W E S

Barometer has risen about 0·20 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 6 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

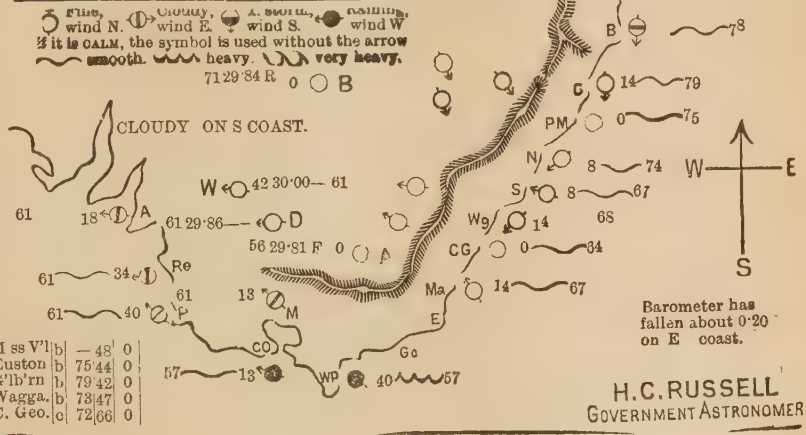
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 6 6·869
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	84	64	0
T'nt'rfield	c	82	63	0
Clarence.	b	86	63	0
Moree....	b	86	63	0
Grafton..	c	87	68	0·06
Gl'n Inn's	b	85	57	0
Inverell..	b	80	61	0
Bourke ..	b	90	63	0
Narrabri	b	92	54	0
Armidalc	b	74	66	0
B'ndem'r.	b	78	42	0
Gunned'h	b	85	61	0
C'namble	b	—	—	0
Lismore..	b	84	71	0
Walcha ..	c	74	56	0
Tamw'rth	b	84	76	0
Coonab'n	b	85	49	0
P.M'cqrie	b	80	65	0·01
W'lcannia	b	—	—	0
M'rr'r'ndi	b	76	59	0
Taree....	b	83	63	0
Cassilis ..	b	73	52	0
M'ss'lbr'k	b	78	62	0
Dubbo. ..	b	90	50	0
Menindie.	b	93	62	0
Singleton	b	75	64	0
N'ls'n sB	b	83	62	0
S 67				
Mudg	b	83	45	0
Ma tland.	b	78	60	0
Hill End.	b	—	—	0
N'wcastle	b	75	61	0
Orange ..	b	72	43	0
Bathurst	b	79	42	0
Forbes...	b	75	49	0
M.V'ct'ria	b	74	53	0
Carcoar..	b	72	47	0
Cond'b'l'n	b	65	45	0
Marsdens	b	80	58	0
Picton. ..	b	76	46	0
Sydney ..	b	71	59	0
Wentw'th	b	80	49	0
Young. ..	b	90	44	0
Woll'g'ng	b	74	53	0
Taralga..	b	77	40	0
Hay	b	81	49	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	74	48	0
Deniliquin.	b	78	48	0
Moruya....	b	68	54	0
Kiandra...	b	70	38	0
Albury	b	83	46	0
Bodalla....	b	68	48	0
Cooma	b	81	43	0
Eden.....	–	–	–	–
		80		

AS 8 30·13 — 7: *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. A. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



M ss V'l	b	—	48	0
Euston	b	75	44	0
G'lb'rn	b	79	42	0
Wagga.	b	73	47	0
C. Geo.	c	72	66	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 7 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 24 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 7 6·869
Barometers corrected to 32° Fa and Mean Sea Level

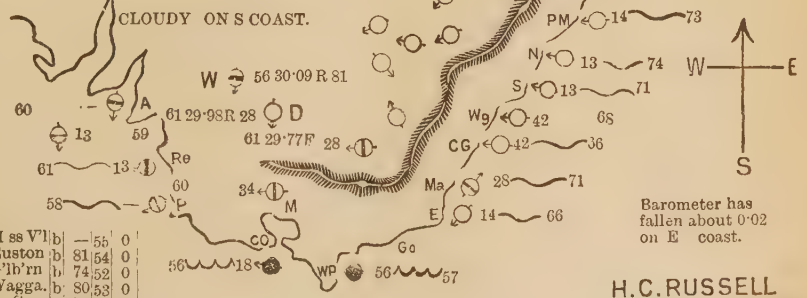
Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R'in
Casino ...	b	94	58	0
T'nt'rfield	b	79	49	0
Clarence.	b	93	58	0
Moree....	b	90	60	0
Grafton..	b	83	55	0
Gl'n Inn's	b	80	46	0
Inverell..	b	77	53	0
Bourke ..	b	91	60	0
Narrabri	b	95	51	0
Armidale	b	72	62	0
B'ndem'r.	b	73	38	0
Gunned'h	b	85	57	0
C'namble	b	—	—	0
Lismore..	b	95	65	0
Walcha ..	g	69	50	0
Tamw'rth	b	87	50	0
Coonab'n	b	81	45	0
P.M'cqrie	b	82	59	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	79	57	0
Taree....	b	84	57	0
Cassilis ..	b	75	51	0
M'ss'lbr'k	b	79	62	0
Dubbo. ...	b	85	50	0
Meniudie.	c	84	62	0
Singleton	b	82	66	0
N'ls'n s B	b	85	60	0
0 69				
Mudg	b	81	45	0
Ma tland.	b	81	63	0
Hill End.	b	—	—	0
N'wcastle	b	87	61	0
Orange ..	b	68	49	0
Bathurst	b	75	48	0
Forbes. ...	b	84	56	0
M. V'ct'ria	b	66	51	0
Carcoar..	b	68	56	0
Cond'b'l'n	b	63	46	0
Marsdens	b	79	61	0
Picton. ..	b	78	54	0
Sydney ..	b	81	64	0
Wentw'th	u	81	58	0
Young. ..	b	84	52	0
Woll'g'ng	b	92	63	0
Taralga..	b	61	40	0
Hay	b	79	53	0

Stations.	wt	M'x	Mn	R'in
Qeaumbey'n	b	71	54	0
Deniliquin .	b	82	52	0
Moruya....	c	75	58	0
Kiandra...	c	69	40	0
Albury	u	75	55	0
Bodalla....	b	79	49	0
Cooma	b	74	48	0
Eden.....	b	71	56	0

M ss V'l	b	—	55	0
Euston	b	81	54	0
G'lb'rn	b	74	52	0
Wagga.	b	80	53	0
C. Geo.	b	78	56	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 9 1885

Sydney Observatory.

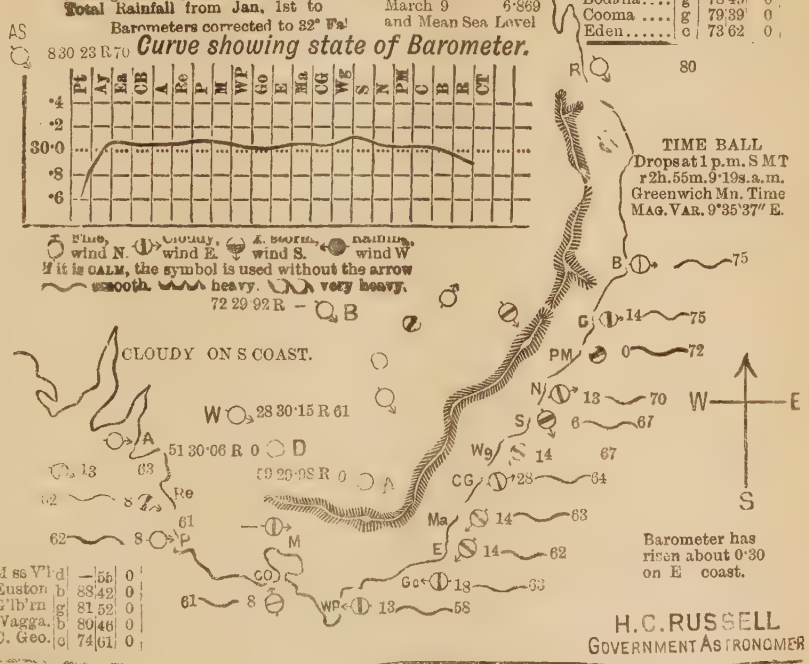
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 9 6·869
Barometers corrected to 32° Fa' and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino...	b	78	66	0
T'nt'rfield	c	82	48	0
Clarence.	g	85	68	0
Moree...	b	95	67	0
Grafton..	b	90	62	0
Gl'n Inn's	c	88	45	0
Inverell..	b	79	53	0
Bourke ..	b	—	62	0
Narrabri	b	92	55	0
Armidalc	b	70	55	0
B'ndem'r.	c	75	45	0
Gunned'h	–	—	—	—
C'namble	–	—	—	—
Lismore..	c	84	69	0·08
Walcha..	c	75	60	0
Tamw'rth	b	86	55	0
Coonab'n	c	87	55	0
P.M'cqrie	u	82	66	0·08
W'lcannia	b	—	—	0
M'rr'r'ndi	o	75	55	0
Taree....	g	83	67	0
Cassilis ..	u	76	60	0
M'ss'lbr'k	g	80	66	0
Dubbo. ..	b	88	60	0
Menindie.	b	81	61	0
Singleton	u	86	62	0
N'ls'n sB	g	82	61	0·02
13 61 Mudg	u	89	43	0
Ma tland.	p	83	61	0
Hill End.	u	—	—	0
N'wcastle	g	75	68	0
Orange ..	c	71	43	0
Bathurst	u	79	42	0
Forbes...	c	73	49	0
M. V'ct'ria	g	73	52	0
Carcoar..	b	68	48	0
Cond'b'l'n	c	65	44	0
Marsdens	c	80	59	0
Picton. ..	d	74	61	0·01
Sydney ..	g	72	65	0
Wentw'th	b	86	53	0
Young. ..	b	85	54	0
Woll'g'ng	g	76	63	0
Taralga..	f	76	38	0
Ilay.....	b	77	51	0

Stations.	w't	M'x	Mn	R'in
Queanbey'n	g	73	48	0
Deniliquin.	b	72	46	0
Moruya....	g	70	69	0
Kiandra...	n	69	28	0
Albury	b	81	55	0
Bodalla....	g	78	45	0
Cooma	g	79	39	0
Eden.....	c	73	62	0

M ss V'l'd	—	55	0
Euston	b	88	42	0
G'lb'rn	g	81	52	0
Wagga.	b	80	46	0
C. Geo.	c	74	61	0



METEOROLOGY.

9 A.M. MARCH 10 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·3*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 10 7·025
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	Wt	M'x	Mn	R'in
Casino ...	c	88	63	0
T'nt'rfield	u	83	51	0
Clarence.	b	84	67	0
Moree....	b	95	61	0
Grafton...	b	90	63	0
Gl'n Inn's	c	85	57	0
Inverell..	b	82	64	0
Bourke ..	b	..	66	0
Narrabri	-	—	—	—
Armidalc	b	75	66	0
B'ndem'r.	b	83	49	0
Gunned'h	c	90	71	0
C'namble	b	—	—	0
Lismore..	b	86	66	0
Walcha..	t	78	60	0·08
Tamw'rth	b	88	66	0
Coonab'n	b	90	57.	0
P.M'cqrie	b	80	67	0
W'lcannia	b	—	—	0
M'rr'r'ndi	g	77	54	0
Taree....	b	71	67	0·15
Cassilis ..	g	75	64	0
M'ss'lbr'k	c	78	67	0
Dubbo. ...	b	96	65	0
Menindie.	b	83	61	0
Singleton	g	81	68	0
N'ls'n s P	g	81	69	0
8 72				
Mudg	b	91	56	0
Ma tland.	g	80	65	0
Hill End.	b	—	—	0
N'wcastle	c	75	69	0·05
Orange ..	b	75	54	0
Bathurst	c	82	2	0
Forbes...	b	82	55	0
M.V'ct'ria	b	72	60	0
Carcoar..	b	78	61	0
Cond'b'l'n	b	69	45	0
Marsdens	b	86	63	0
Picton. ..	u	72	62	0·21
Sydney ..	c	70	65	0·16
Wentw'th	b	90	58	0
Young. ..	b	9[illegible]	57	0
Woll'g'ng	b	72	62	0
Taralga..	b	81	48	0
Hay	b	84	57	0

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	g	69	57	0
Deniliquin .	b	89	48	0
Moruya....	g	74	62	0
Kiandra...	n	73	35	0
Albury	b	88	51	0
Bodalla....	g	76	56	0
Cooma	c	81	43	0
Eden.....	b	70	61	0

78

AS

0 30 12 R 7. *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

79 29·88 F 14 B

CLOUDY ON COAST.

W 14 30·04 F 76

75 8 A 65 30·01 F 14 D

8 63 Re

62 8

59 29·92 F 14

64 8 M

60 0 P

61 8 CO

M ss V't u — 57 ·06
Euston b 87 47 0
G'lb'rn b 75 55 0
Wagga b 87 55 0
C. Geo. p 73 62 ·06

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

R B 76

G 14 79

PM 0 79

N 8 73

S 3 69

Wg 0 72

CG 14 35

Ma 14 67

E 14 69

Go 28 69

WP 13 61

W — E

S

Barometer has fallen about 0·05 on [illegible]

H. C. RUSSELL
[illegible]

METEOROLOGY.

9 A.M. MARCH 11 1885

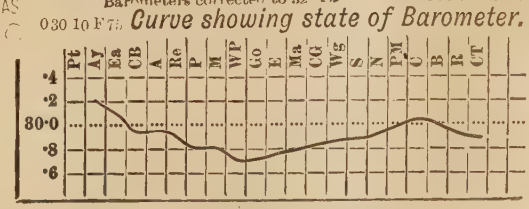
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·6*s.* *E.*

Average Annual Rainfall for 26 years .....50·242.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 11 6·946
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	Mn	R'in
Casino ...	b	87	58	0
T'nt'rfield	c	82	56	0
Clarence .	b	88	60	0
Moree....	b	94	65	0
Grafton ..	b	89	61	0
Gl'n Inn's	b	86	54	0
Inverell..	b	81	62	0
Bourke ..	b	—	75	0
Narrabri	b	95	55	0
Armidale	b	75	67	0
B'ndem'r.	b	76	44	0
Gunned'h	b	90	66	0
C'namble	b	—	—	0
Lismore..	c	85	63	0
Walcha ..	b	78	56	0·01
Tamw'rth	b	90	63	0
Coonab'n	c	90	55	0
P.M'cqrie	b	85	67	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	81	67	0
Taree....	b	86	63	0
Cassilis ..	b	79	61	0
M'ss'lbr'k	b	83	66	0
Dubbo. ...	b	95	61.	0
Menindie.	b	89	65	0
Singleton	b	86	66	0
N'ls'n s P.	b	82	66	0
Mudg	b	91	53	0
Ma tland.	b	85	65	0
Hill End .	b	—	—	0
N'wcastle	b	81	67	0
Orange ..	c	78	59	0·12
Bathurst	b	85	9	0·52
Forbes...	b	78	57	0
M. V'ct'ria	b	78	64	0·06
Carcoar..	b	77	62	0·02
Cond'b'l'n	b	74	50	0
Marsdens	b	90	66	0
Picton. ...	b	82	65	0·01
Sydney ..	c	78	67	0·02
Wentw'th	b	96	58	0
Young. ...	b	92	54	0
Woll'g'ng	b	82	70	0
Taralga..	b	79	57	0
Hay	b	93	57	0

Stations.	wt	m'x	Mn	R'in
Queanbey'n	b	79	56	0
Deniliquin.	b	96	59	0
Moruya....	b	75	60	0
Kiandra...	c	97	37	0
Albury	b	92	53	0
Bodalla....	b	82	51	0
Cooma	c	79	52	0
Eden.....	c	75	61	0



Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 12 1885

Sydney Observatory.

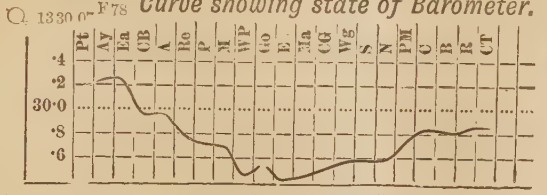
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s. E.*

Average Annual Rainfall for 26 years .....55·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 12 6·946
Barometers corrected to 32° Fa and Mean Sea Level

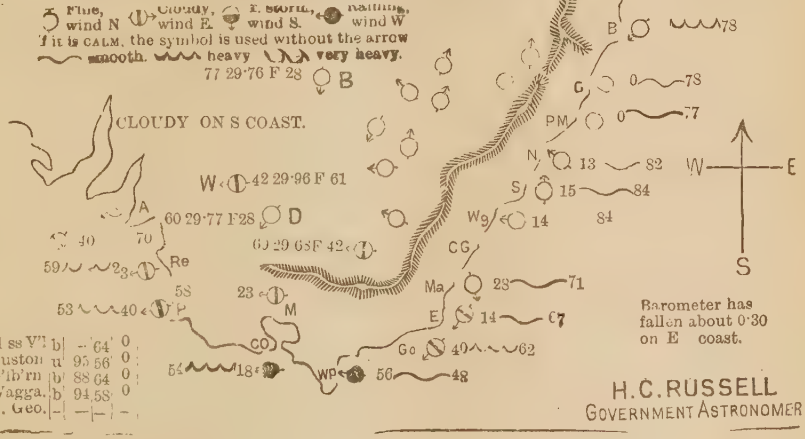
Stations.	wt	m'x	m	r'in
Casino...	b	90 58		0
Tut'rfield	b	83 56		0
Clarence.	b	91 62		0
Moree....	b	94 66		0
Gratton..	b	96 65		0
Gl'h. Inn's	b	89 76		0
Inverell..	b	89 61		0
Bourke...	b	68		0
Narrabri	b	94 54		0
Armidale	b	76 68		0
B'ldem'r.	b	84 42		0
Gunned'h	b	91 68		0
C'hamble	b	-	-	0
Lismore..	b	89 65		0
Walcha..	b	82 59		0
Tamw'th	b	90 60		0
Coonab'n.	b	91 57		0
P.M'cqrie	b	82 66		0
W'lcannia	b	—	-	0
M'rr'r'ndi	b	84 68		0
Taree....	b	89 69		0
Cassilis ..	b	84 67		0
M'ss'lbr'k	b	86 70		0
Dubbo...	b	95 60		0
Menindie.	b	64 46		0
Singleton	b	91 63		0
N'ls'n s P	b	82 67		0
1s 65				
Mudg	b	93 54		0
Ma tland.	b	90 66		0
Hill End.	b	—	-	0
N'wcastle	b	88 70		0
Orange ..	—	—	—	
Bathurst	b	84 63		0
Forbes...	b	85 60		0
M.V'ct'ria	b	81 64		0
Carcoar..	b	78 60		0
Cond'b'l'n	b	61 52		0
Marsdens	b	91 63		0
Picton...	b	85 55		0·01
Sydney..	b	91 69		0
Wentw'th	u	94 56		0
Young...	b	98 53		0
Wolf'g'ng	b	97 70		0
Taralga..	b	86 60		0
Hay.....	c	96 57		0

Stations.	w't	M'x	Mn	R'in
Queanbey'n	b	82	58	0
Deniliquin..	b	97	55	0
Moruya....	b	92	65	0
Kiandra...	c	77	50	0
Albury	u	93	59	0
Bodalla....	c	95	55	0
Cooma	q	87	58	0
Eden.....	c	78	63	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.



Barometer has fallen about 0·30 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MARCH 13 1885

9 A.M.

Sydney Observatory.

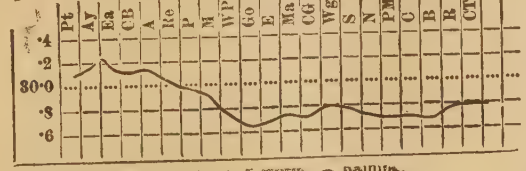
Lat. 33° 51′ 41″ S.; *Long.* 10h. 4m. 10·6s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 13 6·946
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino ...	b	92	57	0
T'nt'rfield	b	84	54	0
Clarence.	b	90	60	0
Moree....	b	94	62	0
Grafton..	b	96	66	0
Gl'n Inn's	b	86	53	0
Inverell..	b	84	59	0
Bourke ..	b	..	59	0
Narrabri	b	95	55	0
Armidalc	b	76	65	0
B'ndem'r.	b	84	41	0
Gunned'h	b	91	62	0
C'nanble	b	—	—	0
Lismore..	b	92	65	0
Walcha...	b	81	55	0
Tamw'rth	b	90	56	0
Coonab'n	b	89	53	0
P.M'cqrie	b	80	65	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	86	60	0
Taree....	b	95	65	0
Cassilis ..	b	85	61	0
M'ss'lbr'k	c	89	66	0
Dubbo. ...	b	90	53	0
Menindie.	b	79	56	0
Singleton	b	96	64	0
N'ls'n sB	b	80	61	0
13 65				
Mudg'	b	91	48	0
Ma tland.	b	93	65	0
Hill End.	b	—	—	0
N'wcastle	b	94	61	0
Orange ..	c	70	43	0
Bathurst	b	79	45	0
Forbes...	b	78	51	0
M.V'ct'ria	b	71	43	0
Carcoar..	b	75	46	0
Cond'b'l'n	b	56	39	0
Marsdens	b	75	55	0
Picton. ...	b	84	53	0
Sydney ..	b	92	59	0
Wentw'th	c	72	48	0
Young. ...	g	89	44	0·04
Woll'g'ng	b	93	55	0
Taralga..	b	74	36	0
Hay	c	73	41	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	b	73	46	0
Deniliquin.	b	86	42	0
Moruya....	c	78	52	0
Kiandra...	g	74	29	0·11
Albury	u	69	46	0
Bodalla....	b	86	45	0
Cooma	c	70	34	0
Eden.....	c	72	57	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Rain, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

CLOUDY ON S COAST.

Barometer has risen about 0·25 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

...OLOGICAL REPORT.—

METEOROLOGY.

9 A.M. MARCH 14 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; *Long.* 10h. 4m. 50·81s. E.

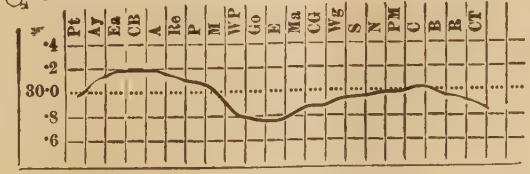
Average Annual Rainfall for 26 years .....50·243.
Average for 2.. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 14 6·946
Barometers corrected to 32° Fa ... Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	91	52	0
T'nt'rfield	b	73	42	0
Clarence.	b	85	50	0
Moree....	b	82	51	0
Grafton..	b	95	61	0
Gl'n Inn's	b	71	46	0
Inverell..	b	75	44	0
Bourke ...	b	..	49	0
Narrabri	b	90	50	0
Armidale	b	66	53	0
B'ndem'r.	b	83	36	0
Gunned'h	b	91	50	0
C'namble	b	—	—	0
Lismore..	b	84	60	0
Walcha..	n	61	36	0
Tamw'rth	b	76	37	0
Coonab'n	b	68	44	0
P.M'cqrie	b	76	50	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	84	58	0
Taree....	b	77	50	0
Cassilis ..	b	66	47	0
M'ss'lbr'k	b	78	51	0
Dubbo. ...	b	70	38	0
Menindie.	b	78	56	0
Singleton	b	76	52	0
N'ls'n s P.	b	79	52	0
13 67				
Mudg'	b	79	38	0
Ma tland.	b	75	50	0
Hill End.	b	—	—	0
N'wcastle	b	73	50	0
Orange ..	b	56	43	0
Bathurst	b	61	37	0
Forbes...	b	70	39	0
M. V'ct'ria	b	66	47	0
Carcoar..	b	60	41	0
Cond'b'l'n	b	59	38	0
Marsdens	b	68	52	0
Picton. ..	b	68	58	0
Sydney ..	b	70	58	0
Wentw'th	g	71	51	0
Young. ...	g	78	47	0
Woll'g'ng	b	72	56	0
Taralga..	b	76	35	0
Hay	c	70	48	0

Stations.	w't	M'x	Mn	R'in
Queanbey'n	b	65	41	0
Deniliquin.	b	70	48	0
Moruya....	b	73	47	0
Kiandra...	c	53	32	0
Albury	u	66	50	0
Bodalla....	b	73	36	0
Cooma	c	60	40	0
Eden.....	c	64	54	0

AS 8 30 29 R67

Curve showing state of Barometer.



Fine, wind N. Cloudy wind E. Snow wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.

64 30·07 R 14 B

CLOUDY ON S COAST.

W 42 30·31 R 61

64 13 A 59 30·03 R14 D

28 61 54 29·91 S 14

52 13 Re

59 8 M

57 13 CO WP 23 58

M ss V'l b 59 46 0
Euston u 73 49 0
G'lb'rn b 62 41 0
Wagga. g 70 43 0
C. Geo. b 68 51 0

R

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

B 74

G 14 67

PM 28 63

N 66

S 16 62

Wg 42 64

CG 42 56

Ma 14 64

E 42 64

Go 34 56

W E S

Barometer has risen about 0·20 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 16 1885

Sydney Observatory.

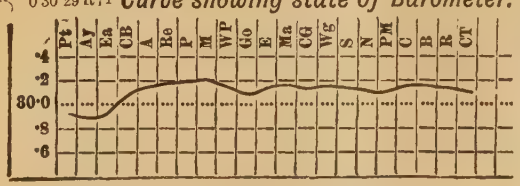
Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·61*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 16 6·946
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	MD	R'in
Casino	b	85	59	0
T'nt'rfield	c	81	49	0
Clarence .	c	86	60	0
Moree....	b	83	58	0
Grafton ..	c	93	64	0
Gl'n Inn's	u	83	46	0
Inverell ..	c	76	44	0
Bourke ..	b	--	59	0
Narrabri	b	88	43	0
Armidale	b	65	53	0
B'ndem'r.	b	74	45	0
Gunned'h	b	82	54	0
C'namble	b	—	—	0
Lismore ..	b	83	66	0
Walcha ..	b	74	50	0
Tamw'rth	–	--	—	—
Coonab'n	b	83	43	0
P.M'cqrie	b	80	59	0
W'lcannia	–	—	—	—
M'rr'r'ndi	b	75	49	0
Taree....	b	81	58	0
Cassilis ..	b	74	49	0
M'ss'lbr'k	b	72	52	0
Dubbo....	b	86	49	0
Menindie.	b	82	65	0
Singleton	b	80	56	0
N'ls'n sP	b	63	59	0
28 87				
Mudg	b	88	41	0
Ma tland.	b	86	54	0
Hill End .	b	--	--	0
N'wcastle	b	76	62	0
Orange ..	c	67	45	0
Bathurst	g	80	40	0
Forbes...	b	69	46	0
M.V'ot'ria	b	71	60	0
Carcoar..	g	65	46	0
Cond'b'l'n	b	66	41	0
Marsdens	b	82	58	0
Picton....	c	78	52	0
Sydney ..	c	72	61	0
Wentw'th	b	85	56	0
Young....	c	88	49	0
Woll'g'ng	g	79	66	0
Taralga ..	b	79	45	0
Hay	b	81	55	0

Stations.	wt	M'x	MD	R'in
Queanbey'n	b	71	48	0
Deniliquin .	b	80	50	0
Moruya....	g	74	61	0
Kiandra...	g	65	28	0
Albury	b	71	50	0
Bodalla....	g	80	55	0·17
Cooma	c	82	54	0
Eden.....	c	71	59	0·08

AS 0 30 29 R 71 *Curve showing state of Barometer.*



Fine, wind N Cloudy, wind E. Storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

68 30·06 F 0 B

CLOUDY ON S COAST.

W 28 30·23 F 64

64 29·95 F 0 D

56 30·04 R 0 A

M ss V'l	–	—	—	—
Euston	b	89	52	0
G'lb'rn	g	78	50	0
Wagga.	c	79	49	0
C. Geo.	g	71	59	0

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W — E
S

Barometer has risen about 0·15 on E coast

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 17 1885

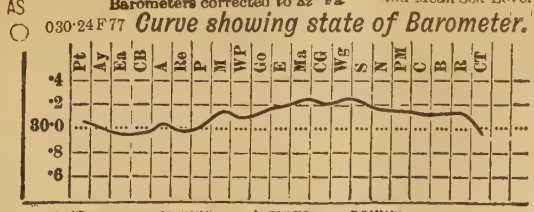
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

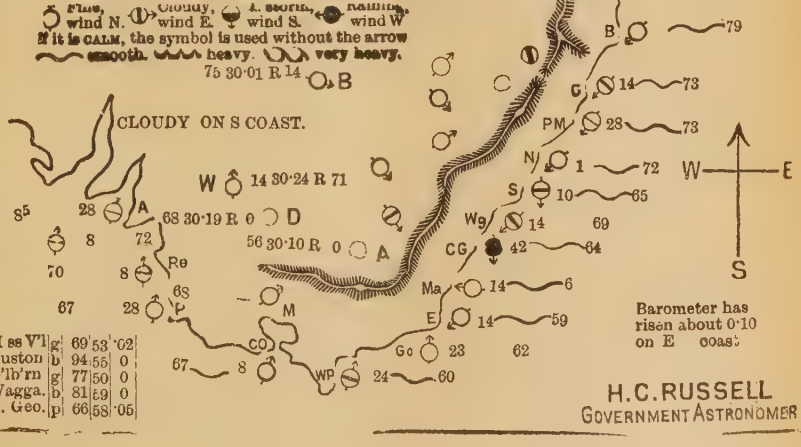
Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 17 7·022
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	g	92	61	0
T'nt'rfield	b	81	52	0
Clarence.	u	90	64	0
Moree....	b	93	64	0
Grafton..	g	98	69	0
Gl'n Inn's	c	86	46	0
Inverell..	b	79	54	0
Bourke ..	b	---	61	0
Narrabri	b	90	55	0
Armidalc	g	70	56	0
B'ndem'r.	b	75	46	0
Gunned'h	c	87	64	0
C'namble	b	—	—	0
Lismore..	c	92	68	0
Walcha..	b	77	49	0
Tamw'rth	b	87	56	0
Coonab'n	b	87	50	0
P.M'cqrie	c	81	64	0·92
W'lcannia	b	—	—	0
M'rr'r'ndi	c	78	62	0
Taree....	b	86	63	0·01
Cassilis ..	g	77	59	0
M'ss'lbr'k	g	80	64	0
Dubbo....	b	91	53	0
Menindie.	b	88	62	0
Singleton	c	85	65	0
N'ls'n s P.	g	84	67	0
8 72 Mudg	g	93	54	0
Ma tland.	c	83	60	0
Hill End.	b	---	—	0
N'wcastle	c	77	66	0
Orange ..	c	73	45	0
Bathurst	u	82	53	0
Forbes...	b	74	53	0
M.V'ct'ria	r	71	52	0·35
Carcoar..	b	70	57	0
Cond'b'l'n	b	68	49	0
Marsdens	b	83	62	0
Picton....	o	77	57	0
Sydney ..	g	74	64	0·08
Wentw'th	b	89	58	0
Young....	b	94	52	0
Woll'g'ng	c	79	62	0
Taralga..	u	79	52	0
Hay	b	84	58	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	g	74	51	0
Deniliquin.	b	87	53	0
Moruya....	b	71	54	0
Kiandra...	b	64	45	0·48
Albury	b	85	53	0
Bodalla....	b	74	45	0
Cooma	b	78	44	0
Eden.....	c	74	59	0



Fine, wind N. Cloudy, wind E. L. storm, wind S. Rainin, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



TIME BALL
Drops at 1 p.m. S M T
r 2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·10 on E coast

M ss V'l	g	69	53	·02
Euston	b	94	55	0
G'lb'rn	g	77	50	0
Wagga.	b	81	49	0
C. Geo.	p	66	58	·05

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 18 1885

Sydney Observatory.

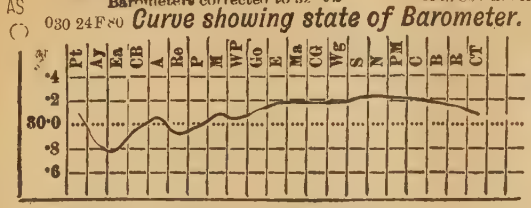
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 18 7·025
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'fn
Casino ...	c	86	59	0·16
T'nt'rfield	c	83	51	0·05
Clarence.	c	82	61	0·14
Moree....	b	98	64	0
Grafton..	b	96	63	0·09
Gl'n Inn's	b	85	52	0
Inverell..	b	80	55	0
Bourke ..	b	91	61	0
Narrabri	b	94	58	0
Armidalc	c	71	62	0
B'ndem'r.	b	78	43	0
Gunned'h	b	86	63	0
C'namble	b	—	—	0
Lismore..	r	86	67	0·14
Walcha ..	t	78	49	0·16
Tamw'rth	b	89	54	0
Coonab'n	b	87	48	0
P.M'cqrie	b	80	63	1·10
W'lcannia	b	—	—	0
M'rr'rndi	o	76	59	0
Taree....	b	84	63	0·06
Cassilis ..	b	72	63	0
M'ss'lbr'k	g	80	62	0
Dubbo. ..	b	87	53	0
Menindie.	b	92	66	0
Singleton	b	74	63	0
N'ls'n sP.	g	79	61	0
8 78				
Mudg	b	90	48	0
Ma tland.	b	78	60	0
Hill End.	b	—	—	0
N'wcastle	c	75	61	0
Orange ..	b	71	45	0
Bathurst	b	78	48	0
Forbes...	b	73	54	0
M.V'ct'ria	b	74	55	0
Carcoar..	b	71	56	0
Cond'b'l'n	b	70	46	0
Marsdens	b	85	61	0
Picton...	b	75	49	0
Sydney ..	b	73	59	0
Wentw'th	b	101	65	0
Young...	b	96	60	0
Wolf'g'ng	b	81	57	0
Taralga..	b	81	40	0
Hay	b	93	52	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	71	33	0
Deniliquin.	b	95	60	0
Moruya....	b	75	55	0
Kiandra...	b	69	40	0
Albury	b	88	55	0
Bodalla....	b	78	46	0
Cooma	b	84	44	0
Eden.....	c	70	65	0

M ss V'l	b	59	49	0
Euston	b	99	59	0
G'lb'rn	b	80	44	0
Wagga.	b	74	52	0
C. Geo.	b	74	57	0



Fine, wind N. Cloudy, wind E. Rain, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MARCH 19 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 19 7·027
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

AS 030 08 F 84 *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. [illegible] wind S. [illegible] wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

79 29·96 F 42 B

FINE GENERALLY

W 56 30·02 F 78

77 29·98F 28 D

62 29·94 F 14 A

66 28 A 70 23 Re 60 82 23 M 70 23 P 83 8 CO WP 34 82 Ma 14 67 E 14 67 Go 23 68 CG 42 69 Wg 14 73 S 1 68 N 13 73 PM 14 71 G 14 72 B 75 R 79

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has fallen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino ...	b	85	61	0·10
T'nt'rfield	c	80	53	0
Clarence .	c	86	60	0·27
Moree....	b	96	64	0
Grafton..	b	89	62	0·12
Gl'n Inn's	b	88	53	0
Inverell..	b	80	54	0
Bourke ..	b	91	68	0
Narrabri	b	90	55	0
Armidale	b	72	63	0
B'ndem'r.	b	82	50	0
Gunned'h	b	85	67	0
C'namble	b	—	—	0
Lismore..	b	86	63	0·04
Walcha..	c	75	55	0
Tamw'rth	b	87	58	0
Coonab'n	b	86	47	0
P.M'cqrie	c	78	62	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	78	51	0
Taree....	b	82	57	0
Cassilis ..	b	77	56	0
M'ss'lbr'k	b	80	63	0
Dubbo. ..	b	91	58	0
Menindie.	b	94	67	0
Singleton	g	82	66	0
N'ls'n sE	b	81	62	0
23 64 Mudg	b	94	47	0
Ma tland.	b	82	58	0
Hill End.	b	—	—	0
N'wcastle	b	76	64	0
Orange ..	b	76	48	0
Bathurst	b	86	47	0
Forbes...	b	75	55	0
M.V'ct'ria	b	74	60	0
Carcoar..	b	75	54	0
Cond'b'l'n	b	75	55	0
Marsdens	b	89	65	0
Picton...	b	82	52	0
Sydney ..	b	7[illegible]	60	0
Wentw'th	b	107	64	0
Young. ...	b	99	53	0
Woll'g'ng	b	82	60	0
Taralga..	b	83	45	0
Hay	b	100	61	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n.	b	79	58	0
Deniliquin.	b	100	64	0
Moruya....	b	76	56	0
Kiandra...	b	75	40	0
Albury	b	94	53	0
Bodalla....	b	85	49	0
Cooma	g	91	46	0
Eden.....	b	70	60	0

M ss V'l	c	76	55	0
Euston	b	102	60	0
G'lb'rn	b	89	46	0
Wagga.	b	93	77	0
C. Geo.	b	73	61	0

OLOGICAL REPORT.—

METEOROLOGY.

9 A.M. MARCH 20 1885

Sydney Observatory.

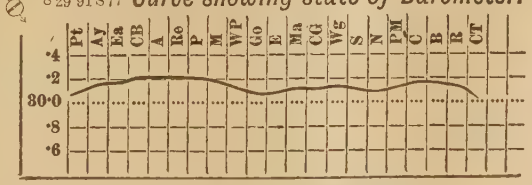
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 56·6s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 20 7·027
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

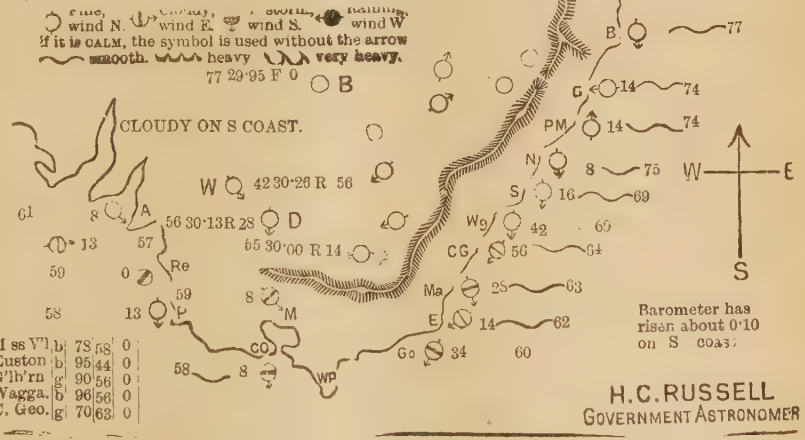
Stations.	wt	M'x	Mn	R'in
Casino ...	b	87	55	0
T'nt'rfield	b	85	48	0
Clarence.	b	89	60	0
Moree....	b	92	65	0
Grafton..	b	94	61	0
Gl'n Inn's	b	87	51	0
Inverell..	b	79	55	0
Bourke ..	b	107	65	0
Narrabri	b	88	61	0
Armidalc	b	73	63	0
B'ndem'r.	b	75	34	0
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	b	87	61	0
Walcha ..	f	78	50	0
Tamw'rth	b	87	59	0
Coonab'n	b	88	51	0
P.M'cqrie	b	83	63	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	81	59	0
Taree....	b	84	58	0
Cassilis ..	b	79	60	0
M'ss'lbr'k	b	82	63	0
Dubbo. ..	b	93	57	0
Menindie.	b	96	60	0
Singleton	b	85	64	0
N'ls'n s P.	b	83	61	0
8 61				
Mudg'	b	94	51	0
Ma tland.	b	82	31	0
Hill End.	b	—	—	0
N'wcastle	b	77	64	0
Orange ..	b	76	53	0
Bathurst	b	89	51	0
Forbes. ..	b	84	63	0
M.V'ct'ria	c	80	67	0
Carcoar..	b	77	68	0
Cond'b'l'n	b	73	55	0
Marsdens	b	91	69	0
Picton. ..	b	84	54	0
Sydney ..	b	78	68	0
Wentw'th	b	91	47	0
Young. ..	b	91	34	0
Woll'g'ng	b	78	62	0
Taralga..	b	89	52	0
Hay	b	97	51	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	83	53	0
Deniliquin.	b	95	46	0
Moruya....	u	76	63	0
Kiandra...	b	76	47	0
Albury	b	94	50	0
Bodalla....	g	84	57	0
Cooma	c	90	52	0
Eden.....	u	76	60	0

M ss V'l	b	78	58	0
Euston	b	95	44	0
G'lb'rn	g	90	56	0
Wagga.	b	96	56	0
C. Geo.	g	70	63	0



wind N. wind E. wind S. wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MARCH 21 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·8s. E.

Average Annual Rainfall for 36 years .....50·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 21 7 282
Barometers corrected to 32° Fa. and Mean Sea Level

Curve showing state of Barometer.

8 30 20 Rain

Pt Ay Ma CB A Re P M WP Ge E Ma CG We S N PM C B R CT

·4 ·2 30·0 ·8 ·6

Fine, wind N. Cloudy, wind E. E. storm, wind S. Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

79 30·02 R 0 B

CLOUDY ON S COAST.

W 28 30·24 F 95

59 30·17 R 14 D

63 30·01 R 0 A

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·1 in on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino ...	b	90	59	0
T'nt'rfield	u	84	55	0
Clarence .	b	88	62	0
Moree....	b	92	64	0
Grafton ..	b	97	63	0
Gl'n Inn's	g	85	55	0
Inverell..	b	80	55	0
Bourke ...	b	107	65	0
Narrabri	b	90	64	0
Armidale	b	74	64	0
B'ndem'r.	b	80	31	0
Gunned'h	b	87	69	0
C'namble	b	—	—	0
Lismore..	b	87	64	0
Walcha ..	c	80	53	0
Tamw'rth	b	90	61	0
Coonab'n	b	92	58	0·35
P.M'cqrie	c	82	65	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	83	60	0·12
Taree....	g	87	59	0
Cassilis ..	b	82	64	0
M'ss'lbr'k	o	86	77	0·32
Dubbo. ..	b	98	63	0·03
Menindie.	b	94	58	0
Singleton	u	83	—	0·10
N'is'n sP	b	82	59	0
⊕ 18 70				
Mudg'	b	95	54	0·72
Ma tland.	u	83	63	0
Hill End .	b	—	—	0·95
N'wcastle	b	78	67	0
Orange ..	c	80	55	0·20
Bathurst	c	89	56	0·17
Forbes...	b	92	66	0
M.V'ct'ria	c	72	60	0·70
Carcoar..	b	79	61	0·39
Cond'b'l'n	b	75	56	0
Marsdens	–	—	—	—
Picton...	r	79	66	0·12
Sydney ...	g	72	64	0·26
Wentw'th	b	81	50	0
Young. ..	b	88	68	0
Woll'g'ng	c	75	63	0
Taralga ..	b	76	40	0·80
Hay	b	81	53	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	73	56	0
Deniliquin .	b	83	49	0
Moruya....	–	—	—	—
Kiandra...	b	74	48	0
Albury	b	85	55	0
Bodalla....	g	79	56	0
Cooma	c	79	46	0
Eden.....	c	65	63	0

M ss V'l	g	63	56	·12
Euston	b	92	44	0
G'lb'rn	g	77	52	·17
Wagga.	b	97	59	0
C. Geo.	c	66	57	·04

METEOROLOGY.

9 A.M. MARCH 23 1885

Sydney Observatory.

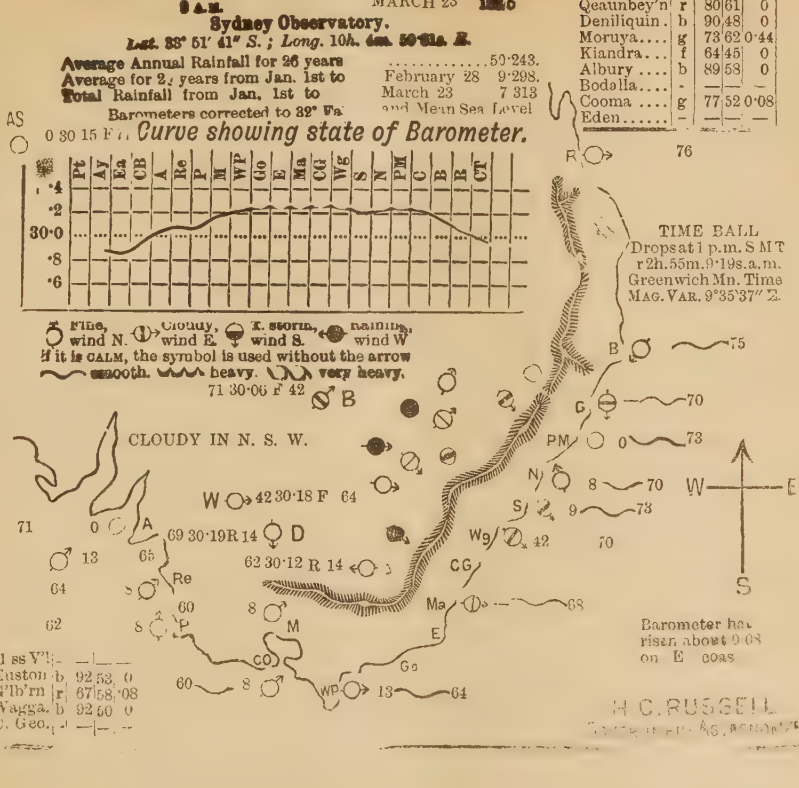
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years	.....	50·243.
Average for 2[illegible] years from Jan. 1st to	February 28	9·298.
Total Rainfall from Jan. 1st to	March 23	7·313

Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	91	54	0
T'nt'rfield	c	83	51	0·44
Clarence.	g	88	60	0
Moree....	b	90	67	0
Grafton..	b	96	61	0
Gl'n Inn's	c	85	52	0
Inverell..	b	80	50	0
Bourke ..	g	96	64	0
Narrabri	g	92	65	0
Armidale	b	73	61	0·82
B'ndem'r.	b	82	44	0·20
Gunned'h	c	96	65	0·11
C'namble	r	—	—	—
Lismore..	c	83	63	0
Walcha ..	g	71	57	0·76
Tamw'rth	c	86	59	0·13
Coonab'n	g	81	62	0·16
P.M'cqrie	b	82	64	0·18
W'leannia	b	—	—	0
M'rr'r'ndi	o	76	51	1·73
Taree....	g	87	58	0·02
Cassilis ..	g	75	65	0·18
M'ss'lbr'k	o	77	62	0·50
Dubbo. ..	g	88	63	0·08
Menindie.	b	78	60	0
Singleton	o	84	64	0
N'ls'n s P.	b	85	66	0
Mudg.	g	92	51	0·11
Ma tland.	c	86	66	0
Hill End.	c	—	—	0·05
N'wcastle	c	72	67	0
Orange ..	g	79	56	0·45
Bathurst	g	86	56	0·07
Forbes. ..	g	79	56	0·11
M. V'ct'ria	u	67	55	0·17
Carcoar..	g	76	62	0·16
Cond'b'l'n	d	65	47	0·34
Marsdens	c	90	63	0·03
Picton. ..	d	74	61	0·07
Sydney ..	g	74	66	0·03
Wentw'th	b	51	57	0
Young. ..	c	98	56	0·23
Wo[illegible]ng	c	77	65	0
Tarlga..	g	72	50	0
Hay	c	85	48	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	r	80	61	0
Deniliquin.	b	90	48	0
Moruya....	g	73	62	0·44
Kiandra...	f	64	45	0
Albury	b	89	53	0
Bodalla....	-	—	—	—
Cooma	g	77	52	0·08
Eden.....	-	—	—	—



H. C. RUSSELL

METEOROLOGY.

9 A.M. MARCH 24 1885

Sydney Observatory.

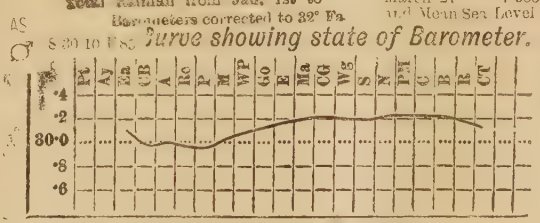
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·6s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 27 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 24 7 333
Barometers corrected to 32° Fa. and Mean Sea Level

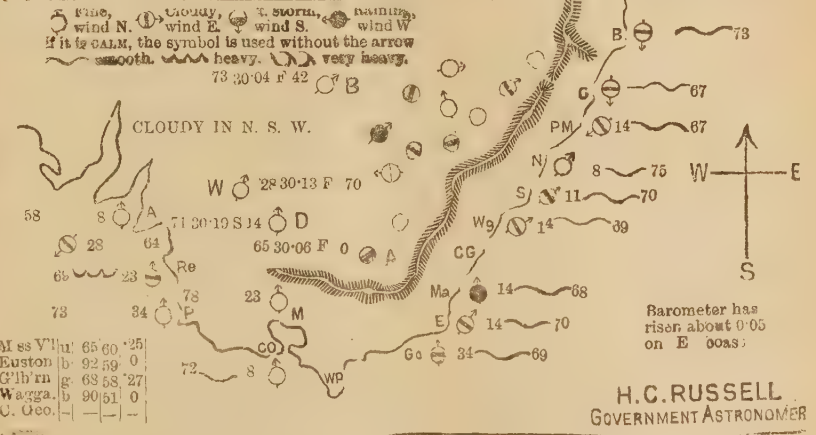
Stations.	wt	M'x	Mn	R'fall
Casino ...	c	85	56	0
T'nt'rfield	c	77	55	0
Clarence .	g	89	60	0·01
Moree....	b	91	64	0
Grafton...	b	92	61	0
Gl'n Inn's	c	79	53	0
Inverell..	b	78	60	0
Bourke ..	b	77	70	1·02
Narrabri	b	90	63	0
Armidale	b	69	62	0
E'ndem'r.	b	81	39	0·10
Gunned'h'	c	88	66	0
C'namble	c	—	—	—
Lismore..	c	80	63	0
Walcha ..	b	68	55	0·02
Tamw'rth	c	82	62	0
Coonab'n	c	84	58	0
P.M'cqrie	u	79	62	0
W'lcannia	b	—	—	0
M'rr'r'ndi	o	74	58	0
Taree....	c	87	54	0
Cassilis ..	g	77	67	0
M'ss'lbr'k	g	80	66	0
Dubbo. ..	o	81	63	0·07
Menindie.	b	83	62	0
Singleton	b	81	61	0
N'ls'n sB	g	70	63	0
18 66				
Mudg	g	87	59	0
Ma tland.	c	84	65	0
Hill End.	u	—	—	0
N'wcastle	b	80	66	0
Orange ..	g	73	58	0·10
Bathurst	g	80	59	0·14
Forbes...	c	78	61	0·14
M.V'ct'ria	c	69	55	1·25
Carcoar..	b	72	63	0
Cond'b'l'n	p	68	48	0·83
Marsdens	b	81	66	0·10
Picton...	g	71	65	0·02
Sydney...	g	76	67	0·02
Wentw'th.	b	86	61	0
Young. ..	u	83	60	0·20
Woll'g'ng	g	74	67	0·25
Taralga..	u	63	45	0·68
Hay	b	88	49	0

Stations.	wt	M'x	Mn	R'fall
Qeaunbey'n	b	70	63	0·03
Deniliquin.	b	92	61	0
Moruya....	r	77	66	0·47
Kiandra...	c	61	44	0·04
Albury	u	88	62	0·02
Bodalla....	g	75	62	0·57
Cooma	g	76	55	0
Eden.....	u	73	64	0·05

M ss V'l	u	65	60	·25
Euston	b	92	59	0
G'lb'rn	g	68	58	·27
Wagga.	b	90	51	0
C. Geo.	—	—	—	—



Fine, wind N. Cloudy, wind E. T. storm, wind S. raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

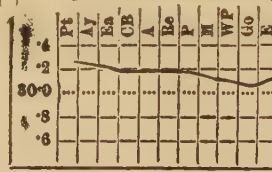
9 A.M. MARCH 25 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 25 7·334
Barometers corrected to 32° Fa and Mean Sea Level

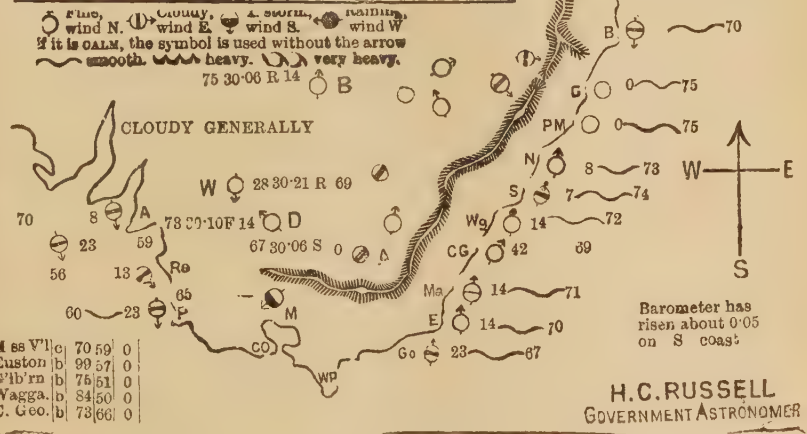
AS 0 30 14 F 8 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. A storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	w't	M'x	Mn	R'in
Casino...	u	88	60	0
T'nt'rfield	c	80	58	0
Clarence.	b	82	62	1·16
Moree....	b	90	64	0
Grafton..	r	89	70	0·28
Gl'n Inn's	u	79	54	0
Inverell..	–	—	—	—
Bourke..	b	84	70	0
Narrabri	b	90	53	0
Armidale	g	71	62	0
B'ndem'r.	b	80	42	0
Gunned'h	b	86	64	0
C'namble	b	—	—	—
Lismore..	u	87	64	0·07
Walcha..	c	74	55	0
Tamw'rth	–	—	—	—
Coonab'n	b	82	50	0
P.M'cqrie	b	76	66	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	76	58	0
Taree....	b	81	63	0
Cassilis..	b	76	64	0
M'ss'lbr'k	g	79	65	0
Dubbo...	b	86	58	0
Menindie.	b	87	68	0
Singleton	u	81	63	0
N'ls'n sB	b	81	64	0
0 67				
Mudg	g	86	54	0·23
Ma tland.	b	83	62	0
Hill End.	b	—	—	0·15
N'wcastle	b	80	66	0
Orange..	c	73	54	0·07
Bathurst	b	77	52	0·29
Forbes...	b	82	57	0
M.V'ct'ria	c	69	59	0
Carcoar..	b	73	60	0
Cond'b'l'n	b	68	48	0
Marsdens	b	81	66	0
Picton...	o	78	63	0
Sydney..	c	75	64	0
Wentw'th	b	95	63	0
Young...	g	87	55	0
Woll'g'ng	b	76	63	0
Taralga..	b	73	55	0
Hay.....	b	91	62	0

Stations.	w't	M'x	Mn	R'in
Qeaunbey'n	b	76	58	0
Deniliquin.	b	91	64	0
Moruya....	c	75	64	0
Kiandra...	b	64	45	0·04
Albury	u	86	66	0·10
Bodalla....	b	77	57	0
Cooma	g	84	51	0·14
Eden.....	b	75	69	0

M ss V'l	c	70	59	0
Euston	b	99	57	0
G'lb'rn	b	75	51	0
Wagga.	b	84	50	0
C. Geo.	b	73	66	0

METEOROLOGY.

MARCH 26 1885

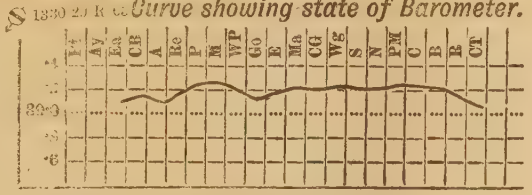
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·6*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 26 7·334

Barometers corrected to 32° Fa. Ie n Sea Level

Curve showing state of Barometer.

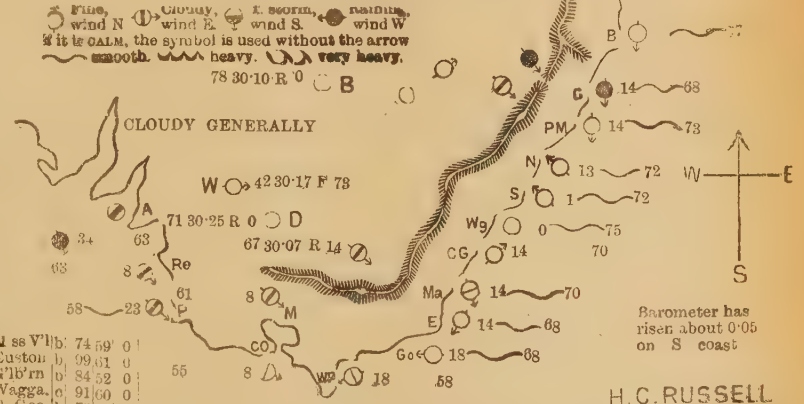


Fine, wind N. Cloudy, wind E. L. storm, wind S. rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

Stations.	Wt.	M'x	Mn	R'in
Qeaunbey'n	b	79	60	0
Deniliquin	b	96	59	0
Moruya	c	78	62	0
Kiandra	c	63	46	0·27
Albury	c	82	57	0·03
Bodalla	b	83	6	0
Cooma	b	5	57	0·03
Eden	b	75	63	0

Stations.	Wt.	M'x	Mn	R'in
Casino	p	83	61	0·05
T'nt'rfield	c	86	55	0
Clarence	p	83	60	0
Moree	b	96	64	0
Grafton	c	81	78	0·55
Gl'n Inn's	c	84	54	0·23
Inverell	b	80	51	0
Bourke	b	97	70	0
Narrabri	b	92	61	0
Armidale	b	71	63	0
B'ndem'r.	b	78	39	0
Gunned'h	b	87	68	0
C'namble	b	—	—	—
Lismore	b	79	64	0
Walcha	c	89	58	0
Tamw'rth	b	89	53	0
Coonab'n	b	88	54	0
P.M'cqrie	b	83	61	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	78	59	0
Taree	b	86	66	0
Cassilis	b	80	61	0
M'ss'lbr'k	b	82	63	0
Dubbo	b	92	58	0
Menindie	b	92	71	0
Singleton	b	85	64	0
N'l'n sB	b	82	63	0
62				
Mudg	b	94	53	0
Ma tland	b	85	63	0
Hill End	b	—	—	0
N'wcastle	b	78	66	0
Orange	—	—	—	—
Bathurst	b	81	54	0
Forbes	c	86	63	0
M.V'ct'ria	b	74	63	0
Carcoar	—	—	—	—
Cond'b'l'n	c	75	59	0·09
Marsdens	b	86	70	0·09
Picton	b	81	56	0
Sydney	b	78	70	0
Wentw'th	c	94	64	0
Young	c	92	60	0
Wol'g'ng	b	80	63	0
Taralga	b	77	41	0
Hay	b	96	62	0

M ss V'l	b	74	59	0
Euston	b	99	61	0
G'lb'rn	b	84	52	0
Wagga	c	91	60	0
C. Geo.	b	73	66	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

BIOLOGICAL BRANCH

METEOROLOGY.

9 A.M. MARCH 27 1885

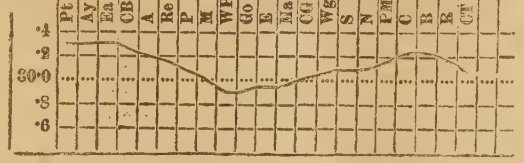
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 52·8s. E.

Average Annual Rainfall for 26 years ....5′·243.
Average for 27 years from Jan. 1st to February 28 9′·238.
Total Rainfall from Jan. 1st to March 27 7·554
Barometers corrected to 32° Fa and Mean Sea Level

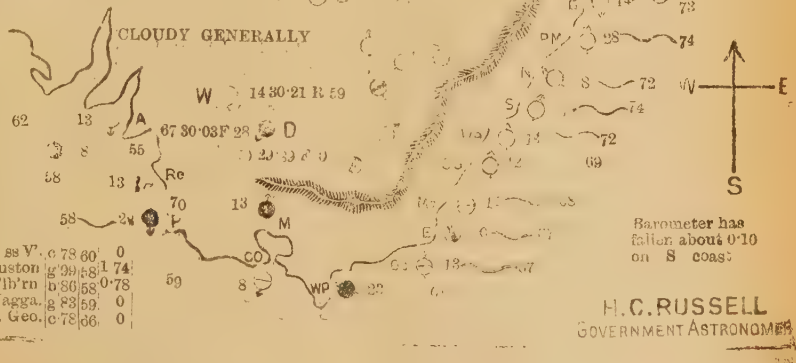
S 30·35 R 64

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Rain, wind S. Storm, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy

80 30·04 F 14



Stations.	wt	W'x	MD	R'in
Casino ...	—	—	—	—
T'nt'rfield	—	—	—	—
Clarence.	c	90	60	0
Moree....	c	94	65	0
Grafton...	b	88	60	0
Gl'n Inn's	b	84	49	0
Inverell..	b	86	55	0
Bourke ..	b	86	56	0
Narrabri	c	90	59	0
Armidale	b	71	62	0
B'ndem'r.	b	80	28	0
Gunned'h	c	87	65	0
C'namble	b	—	—	—
Lismore..	—	—	—	—
Walcha ..	b	76	52	0
Tamw'rth	—	—	—	—
Coonab'n	b	91	60	0
P.M'cqrie	b	82	64	0
W'lcannia	r	—	—	0
M'rr'rndi	c	81	64	0
Taree....	b	87	60	0
Cassilis ..	b	81	61	0
M'ss'lbr'k	b	84	64	0
Dubbo...	b	96	59	0
Menindie.	p	95	67	0·66
Singleton	b	87	61	0
N'ls'n sB	b	80	65	0
0 65 Mudg.	c	97	40	0
Ma tland.	b	84	62	0
Hill End.	b	—	—	—
N'wcastle	b	78	65	0
Orange ..	c	77	55	0
Bathurst	b	89	55	0
Forbes...	b	94	57	0
M.V'ct'ria	b	75	64	0
Carcoar..	b	78	64	0
Cond'b'l'n	c	75	56	0
Marsdens	b	90	51	0
Picton...	c	79	57	0
Sydney ..	c	78	64	0
Wentw'th	g	99	88	0·75
Young...	c	94	61	0
Woll'g'ng	b	91	64	0
Taralga..	b	81	50	0
Hay	r	97	66	0

Stations.	wt	M'x	MD	R'in
Jeaunbey'n	b	78	63	0
Deniliquin	r	99	64	0·82
Moruya....	g	76	65	0
Kiandra...	g	70	46	0·09
Albury	u	92	47	0·10
Bodalla....	g	82	62	0
Cooma	g	88	52	0
Eden.....	c	76	67	0

Stations.	wt	M'x	MD	R'in
M ss V'.	c	78	60	0
Euston	g	99	48	1·74
G'lb'rn	b	86	58	0·78
Wagga.	g	83	59	0
C. Geo.	c	78	66	0

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MARCH 28 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 39·8s. *E.*

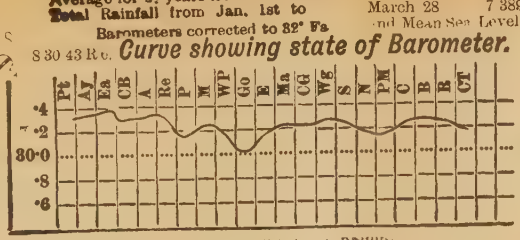
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 28 7 389
Barometers corrected to 32° Fa ...nd Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino...	-	—	—	—
T'nt'rfield	-	—	—	—
Clarence.	b	83	59	0
Moree....	b	88	64	0
Grafton..	b	91	60	0
Gl'n Inn's	-	—	—	—
Inverell..	-	—	—	—
Bourke..	c	100	49	0
Narrabri	u	92	62	0
Armidale	b	72	62	0
B'ndem'r.	b	80	39	0
Gunned'h	g	86	67	0
C'namble	u	—	—	0
Lismore..	-	—	—	—
Walcha..	-	—	—	—
Tamw'rth	c	87	57	0
Coonab'n	g	85	60	0
P.M'cqrie	c	80	60	0
W'lcannia	b	—	—	0
M'rr'r'ndi	o	80	67	0
Taree....	g	90	62	0
Cassilis ..	o	81	73	0
M'ss'lbr'k	g	85	63	0
Dubbo. ..	o	90	66	0·04
Meniudie.	b	69	58	0·05
Singleton	u	89	71	0
N'ls'n sB	g	77	67	0
8 65 Mudg	g	88	61	0
Ma tland.	g	83	68	0
Hill End.	r	—	—	0·10
N'wcastle	g	90	69	0
Orange ..	g	76	58	0·02
Bathurst	r	82	62	0·02
Forbes...	g	86	60	0
M.V'ct'ria	u	70	57	0
Carcoar..	-	—	—	—
Cond'b'l'n	c	85	48	0·04
Marsdens	-	—	—	—
Picton. ..	u	87	62	0·01
Sydney ..	d	89	66	0·06
Wentw'th	b	71	50	0
Young. ..	-	—	—	—
Woll'g'ng	g	91	63	0·08
Taralga..	b	82	51	0
Hay.....	-	—	—	—

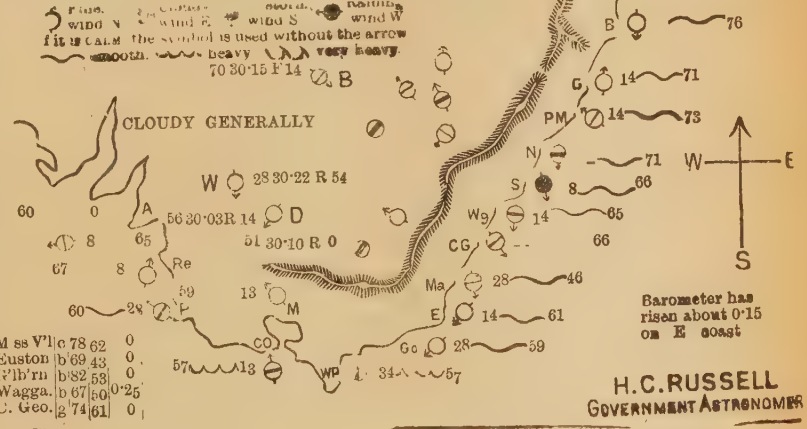
Stations.	wt	M'x	Mn	R'in
Qeanbey'n	b	81	54	0·02
Deniliquin.	b	83	45	0·58
Moruya....	g	84	63	0·03
Kiandra...	b	64	37	0·61
Albury	f	76	48	0·76
Bodalla....	g	73	59	0
Cooma	c	79	41	0
Eden.....	b	75	48	0

M ss V'l	c	78	62	0
Euston	b	69	43	0
G'lb'rn	b	82	53	0
Wagga.	b	67	50	0·25
C. Geo.	g	74	61	0

8 30 43 R 0. *Curve showing state of Barometer.*



wind N wind E wind S wind W
If it is calm the symbol is used without the arrow
smooth. heavy very heavy.



TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Ma. Time
MAG. VAR. 9°35′37″ E.

Barometer has risen about 0·15 on E coast

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 30 1885

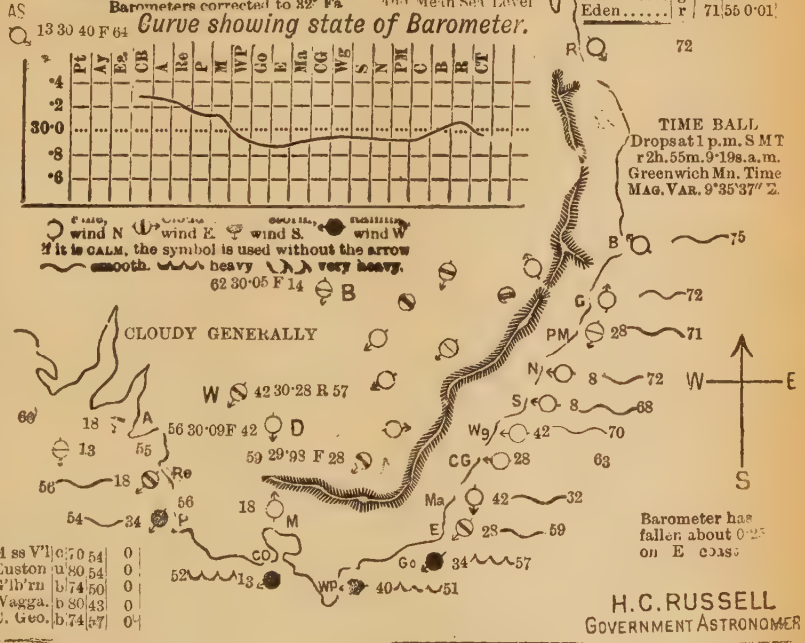
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 30 7·416
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino ...	b	92	66	0
T'nt'rfield	u	84	49	0
Clarence.	b	91	60	0
Moree....	g	92	65	0
Grafton..	g	96	63	0
Gl'n Inn's	u	85	53	0
Inverell..	o	81	52	0
Bourke ..	u	83	64	0
Narrabri	u	89	58	0
Armidale	b	73	62	0
B'ndem'r.	g	77	48	0
Gunned'h	b	85	68	0
C'namble	c	—	—	—
Lismore..	g	71	68	0
Walcha ..	c	73	55	0
Tamw'rth	c	82	60	0
Coonab'n	b	81	53	0·09
P.M'cqrie	c	84	65	0
W'lcannia	b	—	—	0
M'rr'r'ndi	o	76	58	0
Taree....	g	82	69	0·04
Cassilis ..	g	71	61	0·20
M'ss'lbr'k	o	75	63	0·46
Dubbo. ...	b	68	49	1·10
Menindie.	c	74	51	0
Singleton	b	79	64	0·20
N'ls'n RP	c	76	61	0·04
Mudg	b	68	48	1·77
Ma tland.	b	80	62	0·12
Hill End.	b	—	—	0
N'wcastle	b	73	60	0·13
Orange ..	c	70	51	0
Bathurst	c	80	59	0
Forbes...	b	75	53	0
M.V'ct'ria	b	62	50	0
Carcoar..	b	70	61	0
Cond'b'l'n	b	61	41	0
Marsdens	b	77	57	0
Picton...	b	79	59	0
Sydney ..	b	76	62	0·03
Wentw'th	c	78	55	0
Young. ..	c	92	54	0
Woll'g'ng	b	84	61	0
Taralga..	u	76	42	0
Hay	c	86	44	0

Stations.	w't	m'x	mn	R'in
Queanbey'n	c	73	48	0
Deniliquin	b	74	48	0
Moruya....	c	75	52	0
Kiandra...	g	61	41	0
Albury	g	74	41	0
Bodalla....	g	80	43	0
Cooma	g	79	46	0
Eden.....	r	71	55	0·01



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MARCH 31 1885

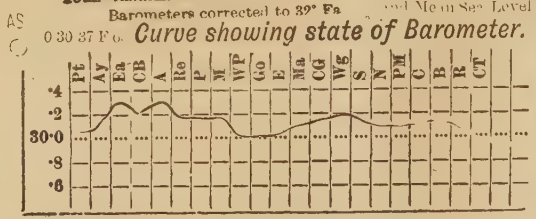
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·81*s.* *E.*

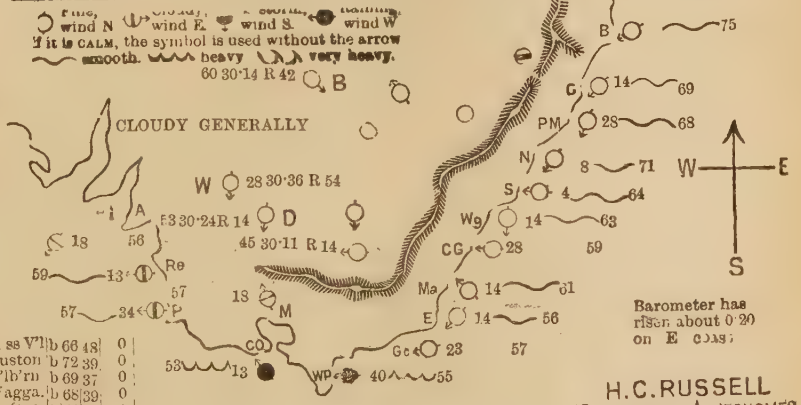
Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to February 28 9·298.
Total Rainfall from Jan. 1st to March 31 7·429
Barometers corrected to 32° Fa[illegible] [illegible] Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	91	59	0·02
T'nt'rfield	b	73	41	0
Clarence.	b	87	57	0
Moree....	b	78	53	0
Grafton..	c	82	59	0
Gl'n Inn's	b	78	41	0
Inverell..	b	80	47	0
Bourke ..	b	82	59	0
Narrabri	b	90	60	0
Armidale	b	68	56	0
B'ndem'r.	n	73	28	0
Gunned'h	b	78	55	0
C'namble	b	—	—	—
Lismore..	b	70	67	0·03
Walcha ..	b	70	40	0
Tamw'rth	b	76	48	0
Coonab'n.	b	77	39	0
P.M'cqrie	b	76	56	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	72	55	0
Taree....	c	78	68	0
Cassilis ..	b	71	51	0
M'ss'lbr'k	c	75	60	0
Dubbo. ..	b	77	42	0
Menindie.	b	70	53	0
Singleton	c	77	62	0
N'ls'n S.P.	c	75	62	0·40
Mudg	b	83	40	0
Ma tland.	b	78	62	0
Hill End.	b	—	—	0
N'wcastle	b	75	62	0·16
Orange ..	b	66	38	0
Bathurst	b	65	34	0
Forbes. ..	b	76	40	0
M.V'ct'ria	b	62	46	0
Carcoar..	n	65	43	0
Cond'b'l'n	b	57	37	0
Marsdens	b	72	51	0
Picton. ..	b	75	54	0
Sydney ..	b	77	58	0·01
Wentw'th	c	69	45	0
Young. ..	b	84	36	0
Woll'g'ng	b	78	56	0·03
Taralga..	n	71	31	0
Bay	b	96	44	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	70	41	0
Deniliquin.	b	67	41	0
Moruya....	b	63	51	0·03
Kiandra...	n	59	22	0
Albury	b	64	41	0
Bodalla....	b	80	43	0
Cooma	n	69	28	0
Eden.....	b	65	49	0



wind N wind E wind S wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

APRIL 1 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 59·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 1 — 7·429

Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. A. storm, wind S. Raining, wind W

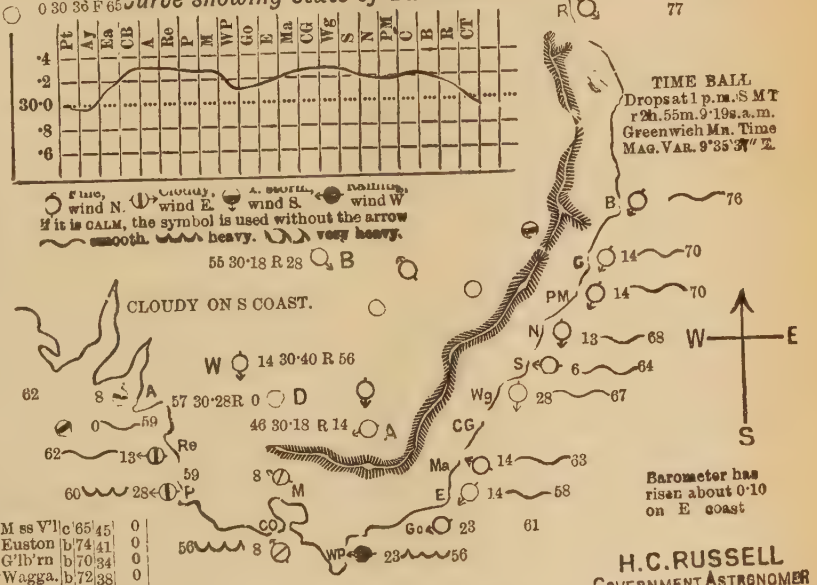
If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R'in
Casino ...	–	—	—	–
T'nt'rfield	c	80	54	0
Clarence.	b	89	57	0
Moree....	b	89	52	0
Grafton..	b	94	60	0
Gl'n Inn's	c	80	51	0
Inverell..	b	74	48	0
Bourke ..	b	75	56	0
Narrabri	b	90	55	0
Armidale	b	66	56	0
B'ndem'r.	b	70	27	0
Gunned'h	b	79	54	0
C'namble	b	—	—	—
Lismore..	–	—	—	—
Walcha ..	g	72	45	0
Tamw'rth	b	80	48	0
Coonab'n	b	78	35	0
P.M'cqrie	b	78	59	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	73	49	0
Taree....	b	79	56	0
Cassilis ..	b	70	46	0
M'ss'lbr'k	b	76	55	0
Dubbo. ..	b	76	40	0
Menindie.	b	69	53	0
Singleton	b	77	60	0
N'ls'n s E	c	79	51	0
8 68				
◐* Mudg'	b	80	37	0
Ma tland.	b	76	57	0
Hill End.	b	—	—	0
N'wcastle	b	73	59	0
Orange ..	b	61	39	0
Bathurst	b	71	33	0
Forbes...	–	—	—	—
M. V'ct'ria	b	64	52	0
Carcoar..	b	61	41	0
Cond'b'l'n	b	55	37	0
Marsdens	b	73	51	0
Picton...	b	74	39	0
Sydney ..	b	71	57	0
Wentw'th	b	72	48	0
Young. ..	b	87	36	0
Woll'g'ng	b	77	53	0
Taralga..	b	69	47	0
Hay	b	77	41	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	–	—	—	—
Deniliquin.	b	69	44	0
Moruya....	b	72	63	0
Kiandra...	n	58	22	0
Albury	b	69	41	0
Bodalla....	b	77	44	0
Cooma	n	76	29	0
Eden.....	b	65	51	0

M ss V'll	c	65	45	0
Euston	b	74	41	0
G'lb'rn	b	70	34	0
Wagga.	b	72	38	0
C. Geo.	–	—	—	—



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 2 1885

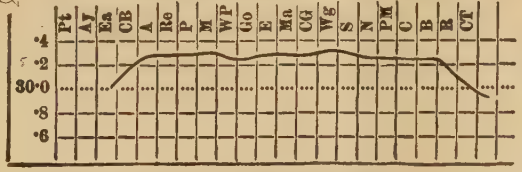
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 2 — 7·432
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

AS 13 30 34 F 6[illegible]

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. [illegible] wind S. Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

63 30·16 F 14 B

CLOUDY ON S COAST.

W — 30·38 F·58

69 13 A 56 30·27 F 0 D

23 61 49 30·19 R 14 A

60 23 Re

59 8 M

59 13 P

57 8 CO WP 18 58

Ma 28 64

E 14 61

Go 23 62

Wg 14 67

CG

S 2 66

N 8 71

PM 0 69

C 14 67

B 75

R 76

Qeaunbey'n — — —
Deniliquin. b 75 44 0
Moruya.... b 73 66 0
Kiandra... n 64 23 0
Albury .... b 74 44 0
Bodalla.... b 76 50 0
Cooma .... c 81 40 0
Eden..... c 68 59 0

Stations.	wt	M'x	Mn	R'in
Casino ...	c	87	61	0
T'nt'rfield	c	83	51	0
Clarence.	c	86	57	0·11
Moree....	b	82	56	0
Grafton..	c	94	62	0
Gl'n Inn's	b	82	54	0
Inverell..	b	76	49	0
Bourke ..	b	79	51	0
Narrabri	b	90	51	0
Armidalc	b	69	59	0
B'ndem'r.	c	78	34	0
Gunned'h	—	—	—	—
C'namble	b	—	—	—
Lismore..	b	85	67	0
Walcha..	c	74	52	0
Tamw'rth	b	82	55	0
Coonab'n	b	82	47	0
P.M'cqrie	b	79	59	0
W'lcannia	b	—	—	0
M'rr'r'ndi	f	74	53	0
Taree....	c	80	55	0
Cassilis ..	o	82	54	0
M'ss'lbr'k	g	76	58	0
Dubbo. ..	b	83	47	0
Menindie.	b	73	55	0
Singleton	u	74	58	0
N'ls'n sP	c	78	58	0
34 79 Mudg	b	68	48	0
Ma tland.	b	75	55	0
Hill End.	b	—	—	0
N'wcastle	b	71	63	0
Orange ..	n	66	40	0
Bathurst	b	79	40	0
Forbes...	b	70	37	0
M.V'ct'ria	b	71	54	0
Carcoar..	b	64	44	0
Cond'b'l'n	b	59	39	0
Marsdens	b	75	52	0
Picton. ..	c	74	50	0
Sydney ..	b	74	58	0
Wentw'th	b	77	50	0
Young. ..	b	87	29	0
Woll'g'ng	g	75	61	0
Taralga..	u	83	43	0
Hay	b	76	41	0

M ss V'l	c	67	54	0
Euston	b	81	41	0
G'lb'rn	b	78	47	0
Wagga.	b	77	40	0
C. Geo.	—	—	—	—

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometer has risen about 0·08 on E coast

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 4 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 4 — 7·438
Barometers corrected to 32° Fa and Mean Sea Level

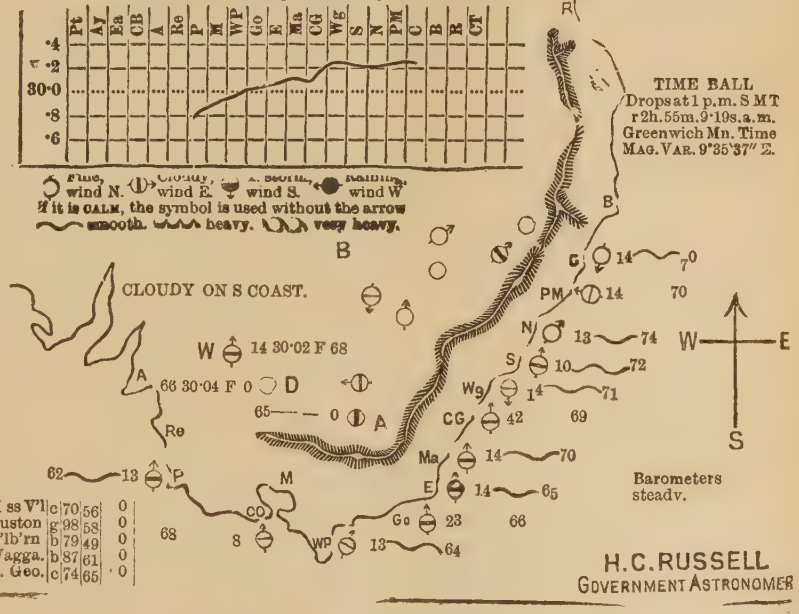
Stations.	wt	m'x	mn	R'in
Casino ...	b	85	55	0
T'nt'rfield	u	78	52	0
Clarence.	c	82	60	0
Moree....	b	93	61	0
Grafton..	g	82	53	0·13
Gl'n Inn's	g	79	51	0
Inverell..	b	77	43	0
Bourke ..	c	94	68	0
Narrabri	b	90	51	0
Armidale	b	70	68	0
B'ndem'r.	b	80	66	0
Gunned'h	–	—	—	—
C'namble	b	—	—	—
Lismore..	c	72	65	0·06
Walcha..	b	74	43	0
Tamw'rth	c	83	61	0
Coonab'n	c	86	49	0
P.M'cqrie	u	81	58	0
W'lcannia	u	—	—	0
M'rr'r'ndi	b	74	54	0
Taree....	c	81	58	0·61
Cassilis ..	g	75	56	0
M'ss'lbr'k	g	79	59	0
Dubbo. ..	b	84	63	0
Menindie.	g	83	63	0
Singleton	b	79	61	0
N'ls'n sE	b	81	65	0
Mudg	u	87	51	0
Ma tland.	b	79	51	0
Hill End.	g	—	—	0
N'wcastle	c	75	68	0
Orange ..	c	70	48	0
Bathurst	c	82	65	0
Forbes...	c	80	54	0
M.V'ct'ria	b	73	63	0
Carcoar..	b	72	56	0
Cond'b'l'n	c	73	—	0
Marsdens	–	—	—	—
Picton. ..	c	75	51	0
Sydney ..	g	75	62	0
Wentw'th	g	85	63	0
Young. ..	g	88	56	0
Woll'g'ng	c	81	61	0
Taralga..	b	81	45	0
Hay.....	–	—	—	—

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	75	51	0
Deniliquin.	b	87	46	0
Moruya....	g	77	58	0
Kiandra...	–	—	—	—
Albury	g	85	47	0
Bodalla....	b	88	50	0
Cooma	–	—	—	—
Eden.....	c	72	63	0

M ss V'l	c	70	56	0
Euston	g	98	58	0
G'lb'rn	b	79	49	0
Wagga.	b	87	61	0
C. Geo.	c	74	65	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

APRIL 6 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·0s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 24 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 6 — 7·438
Barometers corrected to 32° Fa' and Mean Sea Level

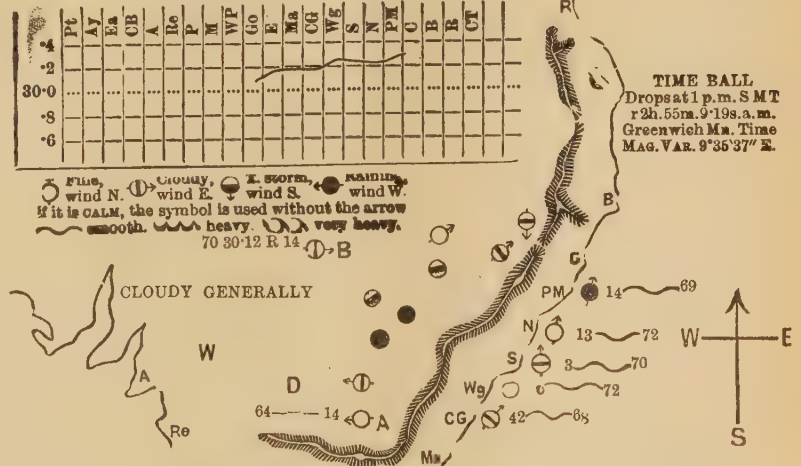
Stations.	wt	M'x	Mn	R'in
Casino ...	c	85	61	0·10
T'nt'rfield	u	78	51	0·07
Clarence.	–	—	—	—
Moree....	b	87	65	0
Grafton..	–	—	—	—
Gl'n Inn's	u	81	51	0
Inverell..	o	77	55	0
Bourke ..	u	88	66	0
Narrabri	c	90	52	0
Armidale	–	—	—	—
B'ndem'r.	c	81	36	0
Gunned'h	–	—	—	—
C'namble	–	—	—	—
Lismore..	c	84	67	0·08
Walcha..	–	—	—	—
Tamw'rth	–	—	—	—
Coonab'n	–	—	—	—
P.M'cqrie	p	81	67	0·18
W'lcannia	–	—	—	—
M'rr'r'ndi	o	76	55	0
Taree....	–	—	—	—
Cassilis ..	–	—	—	—
M'ss'lbr'k	g	80	62	0
Dubbo. ...	p	86	64	0·04
Menindie.	–	—	—	—
Singleton	g	72	53	0
N'ls'n sE	c	82	68	0
Mudg	u	89	55	0
Ma tland.	c	79	51	0
Hill End.	–	—	—	—
N'wcastle	c	77	68	0
Orange ..	–	—	—	—
Bathurst	u	84	—	0
Forbes...	r	72	49	0·75
M.V'ct'ria	b	74	60	0
Carcoar..	–	—	—	—
Cond'b'l'n	u	68	39	0
Marsdens	u	85	70	0·28
Picton...	u	81	60	0
Sydney ..	g	76	65	0
Wentw'th	–	—	—	—
Young. ...	p	89	61	0·30
Woll'g'ng	b	83	61	0
Taralga..	–	—	—	—
Hay	–	—	—	—

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	c	76	57	0·55
Deniliquin.	–	—	—	—
Moruya....	–	—	—	—
Kiandra...	g	65	47	0·12
Albury	c	77	63	0·11
Bodalla....	g	82	52	0·04
Cooma	g	81	56	0·11
Eden.....	u	75	67	0

M ss V'l		—	—	—
Euston	–	—	—	—
G'lb'rn	g	83	58	0
Wagga.	u	90	64	0·44
C. Geo.	u	75	66	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.
70 30·12 R 14 B



TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers steady.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 7 1885

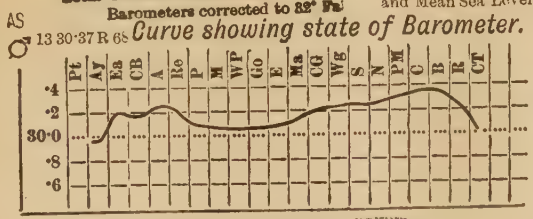
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·9s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 7 — 7·438
and Mean Sea Level
Barometers corrected to 32° Fa[illegible]

Stations.	wt	M'x	Mn	R'in
Casino ...	c	83	56	0·15
T'nt'rfield	u	75	51	0
Clarence .	c	81	62	0·01
Moree....	b	88	63	0
Grafton ..	g	84	62	0·06
Gl'n Inn's	g	77	49	0
Inverell..	b	76	52	0
Bourke ..	–	—	—	—
Narrabri	g	90	51	0
Armidalc	b	69	60	0
B'ndem'r.	b	80	61	0
Gunned'h	c	83	69	0
C'hamble	u	—	—	—
Lismore..	p	83	64	0·10
Walcha ..	c	70	48	0
Tamw'rth	c	86	62	0
Coonab'n	–	—	—	—
P.M'cqrie	c	82	60	0
W'lcannia	–	—	—	—
M'rr'r'ndi	o	75	59	0
Taree....	–	—	—	—
Cassilis ..	u	69	39	0
M'ss'lbr'k	g	77	62	0
Dubbo. ..	p	77	65	0·06
Meniudie.	–	—	—	—
Singleton	g	89	65	0
N'ls'n sB	c	86	66	0
18 64				
Mudg	u	80	57	0
Ma tland.	g	85	65	0
Hill End .	p	—	—	0
N'wcastle	c	78	66	0
Orange ..	r	66	57	0·30
Bathurst	r	72	—	0
Forbes...	g	68	59	0·25
M.V'ct'ria	g	71	60	0
Carcoar..	r	67	63	0
Cond'b'l'n	u	69	39	0
Marsdens	u	73	67	0·22
Picton. ..	u	79	59	0
Sydney ..	g	77	67	0
Wentw'th	–	—	—	—
Young. ..	u	79	61	0·45
Woll'g'ng	g	78	61	0
Taralga..	u	76	45	0
Hay	b	80	52	0
M ss V'l	u	80	65	0·15
Euston	b	83	41	0
G'lb'rn	g	77	53	0·08
Wagga.	p	69	49	0·25
C. Geo.	–	—	—	—

Stations.	wt	M'x	Mn	R'in
Queanbey'n	c	79	49	0·30
Deniliquin.	b	85	50	0
Moruya....	g	77	66	[illegible]
Kiandra...	r	57	51	[illegible]
Albury	c	77	62	0·14
Bodalla....	–	—	—	—
Cooma	g	74	54	0·04
Eden.....	c	74	66	0·0[illegible]



Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 8 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 8 — 7·488
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	w'x	Mn	R'in
Casino...	b	82	55	0
Tnt'rfield	u	72	52	0
Clarence.	c	82	57	0
Moree....	b	95	62	0
Grafton..	b	89	60	0
Gl'n Inn's	c	78	51	0
Inverell..	b	77	48	0
Bourke ..	b	96	68	0
Narrabri	u	90	52	0
Armidalc	b	71	61	0
B'ndem'r.	b	77	34	0
Gunned'h	c	86	62	0
C'namble	–	--	—	—
Lismore..	–	--	—	—
Walcha ..	b	75	45	0
Tamw'rth	b	86	54	0
Coonab'n	c	80	57	0
P.M'cqrie	b	80	58	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	71	58	0
Taree....	b	86	58	0
Cassilis ..	b	75	66	0
M'ss'lbr'k	c	81	64	0
Dubbo. ..	b	84	58	0
Menindie.	c	79	57	0
Singleton	b	85	66	0
N'ls'n sP	c	83	62	0
8 69				
Mudg	b	78	51	0
Ma tland.	c	86	64	0
Hill End.	b	--	--	0
N'wcastle	c	78	65	0
Orange ..	c	68	51	0·28
Bathurst	c	71	—	0
Forbes...	c	79	57	0
M.V'ct'ria	c	79	60	0
Carcoar..	b	69	61	0·17
Cond'b'l'n	c	66	39	0
Marsdens	b	80	61	0·06
Picton. ..	c	88	58	0·63
Sydney ..	g	75	64	0·05
Wentw'th	c	80	52	0
Young. ..	c	89	51	0·03
W oll'g'ng	c	76	64	0 02
Paralga..	–	—	—	—
Bay	b	81	51	0

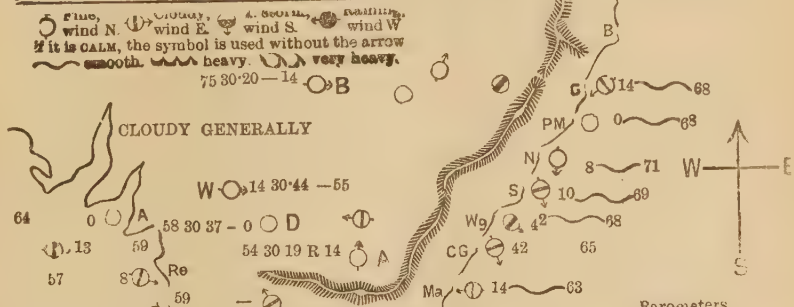
Stations.	wt	w'x	Mn	R'in
Queanbey'n	c	76	59	0
Deniliquin	b	82	48	0
Moruya....	g	78	58	0
Kiandra...	b	61	35	0·03
Albury	b	81	49	0
Bodalla...	b	82	47	0
Cooma	c	82	59	0
Eden.....	c	75	64	0

M ss V'l	u	80	65	0·15
Euston	b	83	41	0
G'lb'rn	g	77	53	0·08
Wagga.	p	69	49	0·25
C. Geo.	–	–	--	—

AS 13 30·37 F 72

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. A. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL.
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 9 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years .....59·243.
Average for 2. years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 8 — 7·488
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	85	59	0·01
Tnt'rfield	u	78	54	0
Clarence .	c	89	61	0·49
Moree....	u	95	66	0
Grafton ..	u	91	63	0
Gl'n Inn's	c	82	55	0
Inverell..	-	—	—	—
Bourke ..	b	97	65	0
Narrabri	u	90	52	0
Armidalc	g	72	61	0
B'ndem'r.	-	—	—	—
Gunned'h	c	93	66	0
C'namble	g	—	—	—
Lismore..	c	86	66	0
Walcha ..	o	76	53	0
Tamw'rth	c	87	58	0·07
Coonab'n	g	88	56	0
P.M'cqrie	c	81	65	0·12
W'lcannia	b	—	—	0
M'rr'r'ndi	r	78	63	0·03
Taree....	-	84	66	0
Cassilis ..	g	78	64	0·26
M'ss'lbr'k	d	82	65	0·06
Dubbo. ...	b	89	63	0
Menindie.	b	79	57	0
Singleton	r	82	61	0·50
N'ls'n s P.	c	79	62	0·04
23 76				
Mudg'	r	89	55	0·45
Ma tland.	r	80	55	0·31
Hill End .	u	—	—	—
N'wcastle	g	75	63	0·10
Orange ..	b	—	—	—
Bathurst	u	79	—	0
Forbes. ..	c	71	54	0
M.V'ct'ria	g	62	47	0·20
Carcoar..	b	69	60	0
Cond'b'l'n	-	—	—	—
Marsdens	-	—	—	—
Picton. ..	o	72	59	0·06
Sydney ..	g	72	65	0
Wentw'th	b	80	51	0
Young. ..	-	—	—	—
Wol'g'ng	g	73	60	0·04
Taralga..	d	79	40	0
Hay	b	81	48	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	g	70	56	0
Deniliquin.	b	73	44	0
Moruya....	c	70	58	0·02
Kiandra...	g	65	35	0
Albury	c	73	50	0
Bodalla....	g	75	50	0
Cooma	g	78	50	0
Eden.....	g	69	61	0

M ss V'l	u	67	54	0·04
Euston	b	84	47	0
G'lb'rn	u	78	53	0
Wagga.	b	77	50	0
C. Geo.	p	73	57	0·09

AS 13 30·30 F 70

Curve showing state of Barometer.

Pt Ay Ea Cb A Re P M WP Go E Ma CG Wg S N PM C B R CT

·4 ·2 30·0 ·8 ·6

Fine, wind N. Cloudy, wind E. Rain, wind S. Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

74 30·16 F 14 B

CLOUDY GENERALLY

W 28 30·40 F 59

52 30 34F 14 D

57 30 18 F 14 A

71 13 A 18 63 54 13 Re 55 60 18 P M CO 58 8 WP 23 59 Go 18 59 E 14 64 Ma 28 62 CG 28 58 Wg 28 62 S 9 66 N 13 63 PM 14 80 G 14 68 B R

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers risen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

APRIL 10 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 10 — 7·488
and Mean Sea Level

Barometers corrected to 32° Fa[illegible]

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. A storm, wind S. Raining, wind W

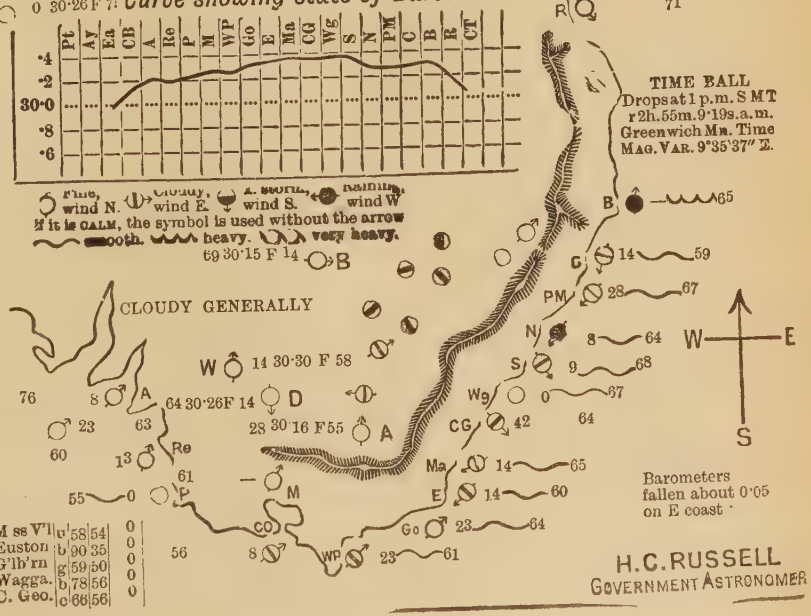
If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R'in
Casino ...	c	84	52	0
T'nt'rfield	c	77	46	0
Clarence .	c	85	57	0
Moree....	u	88	64	0
Grafton ..	c	80	63	0
Gl'n Inn's	c	79	50	0
Inverell..	o	78	47	0
Bourke ..	c	93	66	0·76
Narrabri	u	90	51	0
Armidale	g	71	63	0·60
B'ndem'r.	u	75	44	0
Gunned'h	c	83	60	0·05
C'namble	g	—	—	0 16
Lismore..	c	82	59	0
Walcha ..	u	70	58	0·66
Tamw'rth	c	78	59	0
Coonab'n	u	79	57	0·02
P.M'cqrie	u	76	62	1·85
W'lcannia	b	—	—	0
M'rr'r'ndi	o	66	57	0·77
Taree....	p	69	62	1·15
Cassilis ..	g	65	59	0
M'ss'lbr'k	g	68	62	0·74
Dubbo. ..	b	79	58	0
Menindie.	b	80	56	0
Singleton	u	68	58	1·17
N'ls'n sB	u	70	62	0·65
Mudg	u	73	52	0·09
Ma tland.	p	75	62	0·72
Hill End.	u	—	—	0
N'wcastle	r	67	62	0·48
Orange ..	-	—	—	—
Bathurst	c	66	—	0
Forbes. ..	c	75	54	0
M.V'ct'ria	g	60	50	0·10
Carcoar..	b	67	61	0
Cond'b'l'n	c	65	48	0
Marsdens	b	81	61	0
Picton. ..	g	65	58	0·01
Sydney ..	c	69	61	0·03
Wentw'th	b	83	45	0
Young. ..	u	81	51	0
W oll'g'ng	b	69	60	0
Paralga..	-	—	—	—
May	b	81	51	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	62	55	0
Deniliquin.	b	81	49	0
Moruya....	c	89	57	0
Kiandra...	f	59	37	0
Albury	c	80	52	0
Bodalla....	c	70	50	0
Cooma	g	74	41	0
Eden.....	c	69	61	0

M ss V'll	u	58	54	0
Euston	b	90	35	0
G'lb'rn	g	59	50	0
Wagga.	b	78	56	0
C. Geo.	c	66	56	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 11 1885

Sydney Observatory.

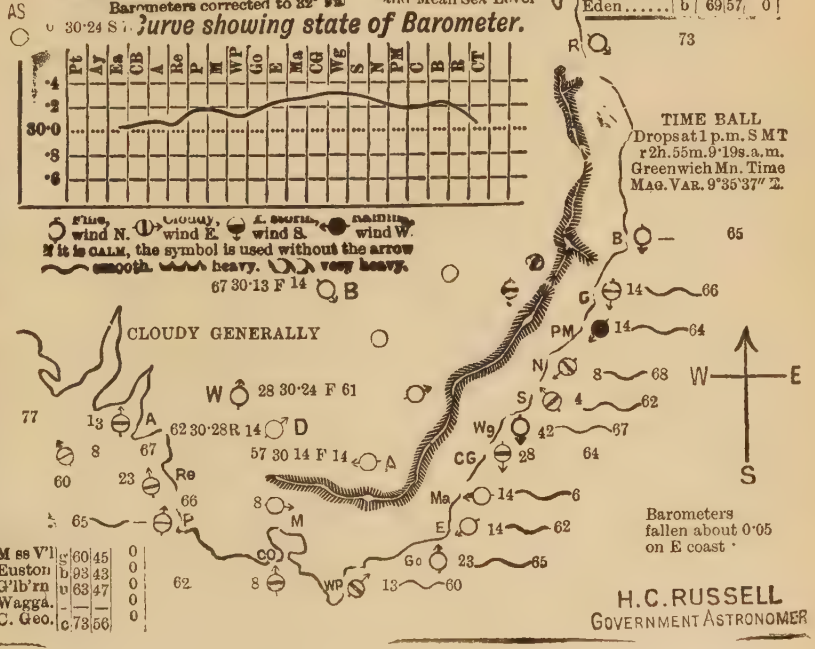
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 32 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 11 — 7·492
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	86	54	0
T'nt'rfield	c	80	49	0
Clarence .	u	78	58	0
Moree....	b	88	60	0
Grafton..	b	87	63	0
Gl'n Inn's	b	78	51	0
Inverell..	b	79	54	0
Bourke ..	b	83	61	0
Narrabri	b	90	61	0
Armidalc	g	66	61	0
B'ndem'r.	b	74	39	0·49
Gunned'h	b	76	61	0·15
C'namble	–	—	—	—
Lismore..	c	84	62	0
Walcha ..	u	66	51	0·36
Tamw'rth	b	75	56	0·60
Coonab'n	b	70	52	0·04
P.M'cqrie	p	72	61	0·02
W'lcannia	b	—	—	0
M'rr'r'ndi	b	68	59	0·11
Taree....	g	73	62	0·14
Cassilis ..	c	66	61	0
M'ss'lbr'k	d	71	63	0·07
Dubbo. ..	–	—	—	—
Menindie.	b	85	59	0
Singleton	u	72	61	0·13
N'ls'n sE	–	—	—	—
Mudg	u	72	52	0
Ma tland.	u	73	63	0·25
Hill End.	c	—	—	0
N'wcastle	c	70	62	0·64
Orange ..	b	—	—	0
Bathurst	c	71	—	0·03
Forbes...	b	75	54	0
M. V'ct'ria	g	58	49	0·04
Carcoar..	b	67	53	0
Cond'b'l'n	b	65	46	0
Marsdens	b	81	61	0
Picton. ..	c	67	48	0
Sydney ..	g	70	59	0
Wentw'th	b	87	49	0
Young. ..	b	87	50	0
Woll'g'ng	b	75	61	0
Taralga..	u	66	38	0
Hay	b	84	54	0

Stations.	W't	M'x	Mn	R'in
Qeaunbey'n	b	66	50	0
Deniliquin .	b	83	56	0
Moruya....	b	74	54	0
Kiandra ...	b	61	35	0
Albury	b	80	73	0
Bodalla....	b	77	45	0
Cooma	g	78	44	0
Eden.....	b	69	57	0

M ss V'l	g	60	45	0
Euston	b	93	43	0
G'lb'rn	u	63	47	0
Waggá.	–	—	—	0
C. Geo.	c	73	56	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 13 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 13 — 7·500
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'fn
Casino ...	–	—	—	—
T'nt'rfield	c	77	60	0
Clarence..	c	81	56	0
Moree....	b	93	62	0
Grafton..	c	85	57	0·02
Gl'n Inn's	b	80	48	0
Invereli..	u	78	47	0
Bourke ..	u	92	63	0
Narrabri	b	92	52	0
Armidale	b	67	58	0
B'ndem'r.	f	79	35	0
Gunned'h	c	74	63	0
C'namble	–	—	—	—
Lismore..	b	79	63	0·03
Walcha ..	c	68	57	0
Tamw'rth	c	81	56	0
Coonab'n	b	83	50	0
P.M'cqrie	b	77	60	0
W'lcannia	–	—	—	—
M'rr'r'ndi	f	71	55	0·14
Taree....	c	80	59	0
Cassilis ..	c	68	61	0
M'ss'lbr'k	g	73	62	0·02
Dubbo...	b	86	61	0
Menindie.	g	83	66	0
Singleton	g	75	66	0·38
N'ls'n sB	b	82	61	0·80
23 61 Mudg	g	85	48	0
Ma tland.	c	76	40	0·02
Hill End.	b	—	—	0
N'wcastle	f	73	61	0
Orange ..	–	—	—	—
Bathurst	b	78	40	0
Forbes...	b	76	39	0
M.V'ct'ria	g	66	55	0
Carcoar..	g	70	57	0
Cond'b'l'n	c	70	47	0
Marsdens	–	—	—	—
Bicton...	g	74	56	0
Sydney ..	g	75	62	0
W'entw'th	u	88	67	0
Young...	u	80	60	0
W'olf'g'ng	g	80	68	0
Taralga..	u	71	45	0
Bay.....	g	87	61	0

Stations.	wt	M'x	Mn	R'fn
Queanbey'n	c	70	52	0
Deniliquin.	c	88	57	0
Moruya....	g	74	59	0
Kiandra...	c	59	38	0
Albury	c	82	55	0
Bodalla....	g	85	42	0
Cooma	g	80	48	0
Eden.....	c	71	61	0

M ss V'l	u	68	56	0
Euston	g	96	58	0
G'lb'rn	b	75	43	0
Wagga.	b	82	50	0
C. Geo.	c	73	59	0

AS 13 30·3[illegible]

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy. very heavy.

68 30·06 F 14 B

CLOUDY GENERALLY

W 28 30·09 F 61

58 0 A 68 30·17 F 0 D

34 54

Re 60

57 23 P M

61 0 A

CO 55

8 WP 13 58

CG 14 64

Ma 14 61

E 14 61

Go 23 63

Wg 0 77

S 3 66

N 8 64

PM 14 69

G 14 65

B 72

R 73

TIME BALL
Drops at 1 p.m. S M T
r 2h. 5·5m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers fallen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 14 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·0s. E.

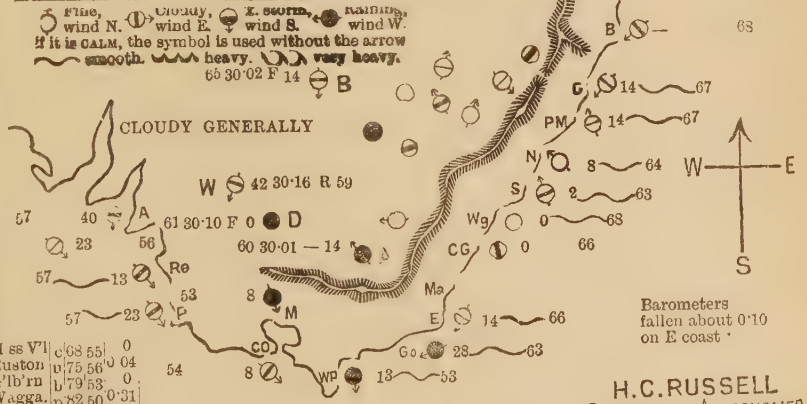
Average Annual Rainfall for 26 years .....50·243.
Average for 25 years from Jan. 1st to March 31 – 14·027.
Average Rainfall from Jan. 1st to April 14 – 7·503
Barometers corrected to 32° Fah. and Mean Sea Level

Stations.	wt	Mx	Mn	Rn
Cassino ...	u	84	70	0
Flat'field	u	80	[illegible]	0
Clarence..	g	85	[illegible]	0
Morse....	c	[illegible]	[illegible]	[illegible]
Grafton..	g	87	[illegible]	[illegible]
Gr'ton's	u	[illegible]	[illegible]	[illegible]
Inverell..	u	72	[illegible]	[illegible]
Bourke...	c	[illegible]	[illegible]	[illegible]
Narrabri	g	85	[illegible]	0
Armidale	c	67	58	0·02
B'ndem'r.	b	76	37	0
Gunned'h	c	82	60	0
Inverramble	–	—	—	—
Lismore..	p	80	64	0·54
Walcha..	g	70	56	0
Tamw'rth	c	80	56	0
Coonab'n	c	84	54	0
P. M'cqrie	c	77	61	0
W'leannia	–	—	—	—
M'rr'r'ndi	g	71	56	0
Taree....	–	—	—	—
Cassilis ..	c	74	58	0
N'sa'lbr'k	g	73	62	0
Dubbo...	p	87	60	0
Menindie.	u	73	61	0·03
Singleton	g	75	61	0
N'ls'n sB	c	81	64	0
Bourke 8	61			
Mudgee	–	—	—	—
Maitland.	f	77	62	0
Hill End.	b	—	—	0
N'wcastle	f	72	61	0
Orange ..	c	71	53	0
Bathurst	c	81	51	0
Forbes...	g	79	60	0·08
M. V'ct'ria	c	70	57	0
Carcoar..	b	70	60	0
Cond'b'l'n	r	65	48	0·62
Marsdens	–	—	—	—
Picton...	f	75	57	0
Sydney..	f	73	61	0
Wentw'th	u	68	60	0·06
Young...	–	—	—	—
Wolf'g'ng	b	78	61	0
Talooga..	u	76	47	0
Bay	–	—	—	–

Stations.	wt	Mx	Mn	Rn
Queanbey'n	c	73	57	[illegible]
Deniliquin.	r	[illegible]	[illegible]	[illegible]
Moruya..	–	—	—	—
Kiandra.	c	62	[illegible]	[illegible]
Albury ..	d	84	[illegible]	[illegible]
Bodalla....	–	—	—	—
Cooma	g	80	48	[illegible]
Eden.....	u	70	63	[illegible]

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



Mss V'l	c	68	55	0
Euston	u	75	56	0·04
G'lb'rn	b	79	53	0
Wagga.	p	82	50	0·31
C. Geo.	c	74	58	0

Barometers fallen about 0·10 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 15 1885

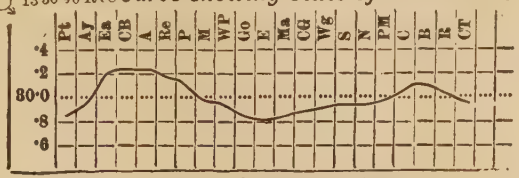
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 24 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 15 — 7·618
and Mean Sea Level

Barometers corrected to 32° Fah

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

TIME BALL
Drops at 1 p.m. S M T
r 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·15 on E coast

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino ...	b	82	58	0·45
T'nt'rfield	c	76	56	0·90
Clarence .	c	—	—	0
Moree....	b	94	60	0·09
Grafton ..	c	81	62	0·47
Gl'n Inn's	u	78	51	0
Inverell ..	u	75	64	0·33
Bourke ..	u	77	59	0·04
Narrabri	u	84	61	0·42
Armidalc	b	68	61	0·09
B'ndem'r.	r	75	44	0·10
Gunned'h	b	82	59	0·43
C'namble	r	—	—	0·25
Lismore..	c	77	62	0·11
Walcha ..	g	70	54	0
Tamw'rth	g	83	54	0·10
Coonab'n	p	81	53	0·72
P.M'cqrie	c	79	65	0
W'loannia	u	—	—	—
M'rr'r'ndi	u	74	58	0·14
Taree....	b	82	58	0
Cassilis ..	b	74	55	0·15
M'ss'lbr'k	g	76	62	0·13
Dubbo. ...	g	71	41	0·40
Menindie.	g	75	56	0
Singleton	b	73	63	0·44
N'ls'n BP	b	83	59	0·03
8 63				
Mudg	u	79	48	0·29
Ma tland.	b	79	62	0·19
Hill End.	p	—	—	0·24
N'wcastle	b	74	61	0·07
Orange ..	-	—	—	—
Bathurst	u	79	48	0·13
Forbes...	g	68	55	0·17
M. V'ct'ria	u	72	54	0·25
Carcoar..	g	70	69	0·10
Cond'b'l'n	-	—	—	—
Marsdens	u	66	62	0·81
Picton. ..	b	79	59	0·48
Sydney ..	c	77	61	0·12
Wentw'th	g	64	53	0·06
Young. ..	g	68	42	0
Wolll'g'ng	b	80	67	0·15
Taralga ..	g.	78	38	1·21
Hay	u	69	54	0·44

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n'	c	70	58	0·75
Deniliquin .	r	66	51	1·12
Moruya....	c	72	59	0·68
Kiandra...	r	60	45	0·33
Albury	p	68	60	0·52
Bodalla....	g	76	54	0·33
Cooma	g	78	52	1·15
Eden.....	p	71	62	0·30

M ss V'l	u	67	35	0·67
Euston	u	67	52	0
G'lb'rn	g	74	50	0·86
Wagga.	p	65	50	0·72
C. Geo.	b	73	58	0

METEOROLOGY.

9 A.M. APRIL 16 1885

Sydney Observatory.

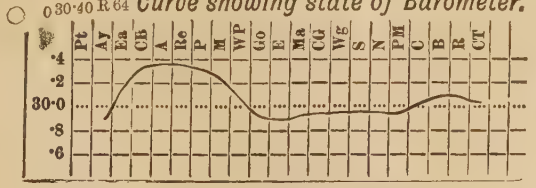
Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·21*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 16 — 7·622

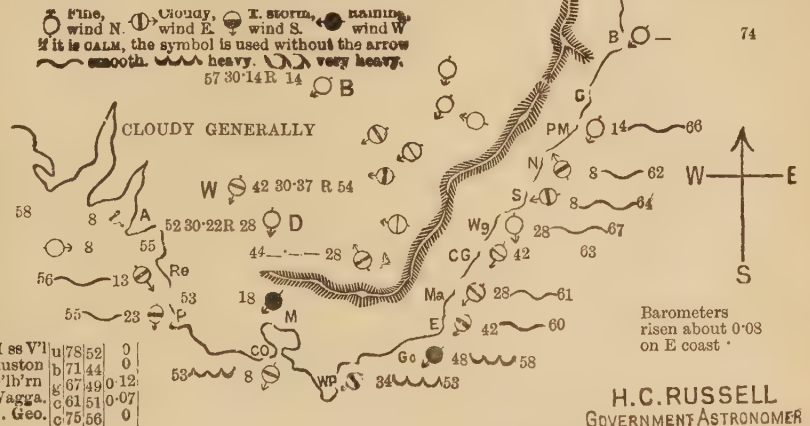
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	MN	R'in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	–	—	—	—
Moree....	c	84	52	0·16
Grafton..	b	89	61	0·02
Gl'n Inn's	–	—	—	—
Inverell..	–	—	—	—
Bourke ..	b	71	50	0
Narrabri	b	83	49	0
Armidalc	b	66	58	0·15
B'ndem'r.	g	60	40	0·16
Gunned'h	–	—	—	—
C'namble	–	—	—	—
Lismore..	–	—	—	—
Walcha..	–	—	—	—
Tamw'rth	c	74	54	0·35
Coonab'n	–	—	—	—
P.M'cqrie	b	80	57	0·10
W'lcannia	c	—	—	0
M'rr'r'ndi	g	67	54	0·09
Taree....	b	82	58	0·02
Cassilis ..	–	—	—	—
M'ss'lbr'k	g	72	57	0·51
Dubbo. ...	u	73	52	0·18
Menindie.	b	67	54	0
Singleton	b	75	61	0·10
N'ss'n sB	c	79	61	0
Mudg	u	69	45	0·41
Ma tland.	u	77	58	0·20
Hill End.	u	—	—	0·98
N'wcastle	g	75	57	0·30
Orange ..	–	—	—	—
Bathurst	u	63	45	0·50
Forbes...	g	60	49	0·04
M. V'ct'ria	g	63	45	0·20
Carcoar..	r	67	51	1·06
Cond'b'l'n	u	55	35	0·03
Marsdens	u	65	56	0·06
Picton. ..	c	73	55	0
Sydney ..	c	76	60	0
Wentw'th	g	66	46	0
Young. ..	p	70	42	0·21
Wol'g'ng	c	79	61	0
Taralga..	g	66	40	0·30
Hay	b	65	42	0·06

Stations.	wt	M'x	MN	R'in
Qeaunbey'n	g	63	53	0·05
Deniliquin.	b	69	45	0·05
Moruya....	g	79	59	0
Kiandra...	c	59	40	0·69
Albury	c	62	54	0·20
Bodalla....	g	79	50	0
Cooma	g	66	46	0·18
Eden.....	u	70	57	0



Fine, wind N. Cloudy, wind E. T. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 17 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

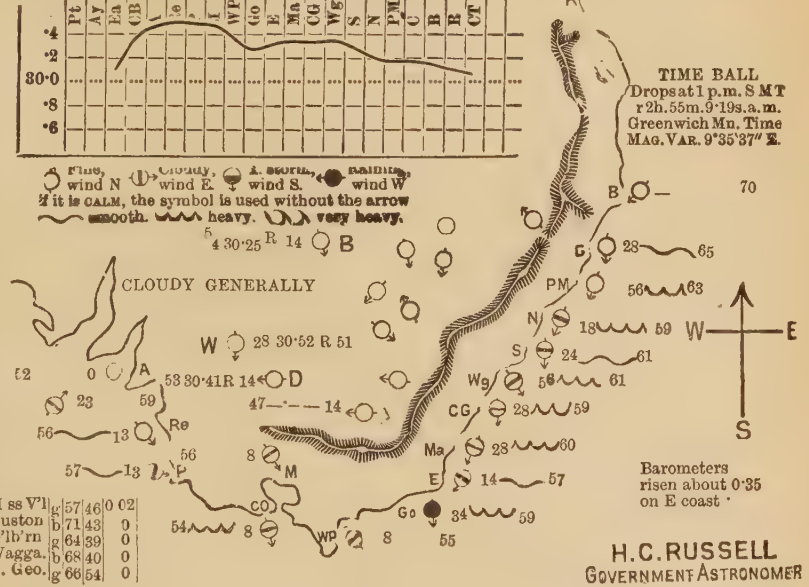
Average Annual Rainfall for 26 years .....50·243.
Average for 2.. years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 17 — 7·630

Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino ...	b	88	50	0
T'nt'rfield	–	—	—	—
Clarence .	b	85	54	0
Moree....	b	78	51	0
Grafton ..	b	87	54	0
Gl'n Inn's	b	63	49	0
Inverell ..	–	—	—	—
Bourke ..	b	72	46	0
Narrabri	b	70	41	0
Armidale	b	61	55	0
B'ndem'r.	b	62	37	0·02
Gunned'h	b	66	54	0
C'namble	–	—	—	—
Lismore..	b	83	57	0
Walcha ..	c	70	45	0·06
Tamw'rth	c	65	47	0
Coonab'n	b	65	41	0
P.M'cqrie	b	77	57	0
W'lcannia	—	—	—	—
M'rr'r'ndi	c	64	52	0
Taree....	c	75	52	0·01
Cassilis ..	b	60	49	0
M'ss'lbr'k	o	68	51	0·08
Dubbo. ..	b	—	42	0
Menindie.	b	66	50	0
Singleton	b	65	56	0·12
N'ls'n sP.	r	77	57	0·38
40 68				
Mudg'	b	65	35	0
Ma tland.	u	71	59	0·10
Hill End.	b	—	—	0
N'wcastle	q	72	57	0·12
Orange ..	–	—	—	—
Bathurst	b	57	34	0
Forbes...	b	61	43	0
M.V'ct'ria	g	62	43	0·47
Carcoar..	b	55	51	0·06
Cond'b'l'n	b	53	35	0
Marsdens	b	66	41	0
Picton. ..	b	67	52	0·01
Sydney ..	c	68	56	0·01
Wentw'th	b	66	42	0
Young. ..	b	75	36	0
Woll'g'ng	c	69	57	0
Taralga..	g	66	35	0·16
Hay	b	61	44	0
M ss V'l	g	57	46	0·02
Euston	b	71	43	0
G'lb'rn	g	64	39	0
Wagga.	b	68	40	0
C. Geo.	g	66	54	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	60	46	0
Deniliquin .	b	63	43	0
Moruya....	g	65	55	0
Kiandra...	c	50	32	0
Albury	b	71	41	0
Bodalla....	g	68	51	0
Cooma	c	60	43	0
Eden.....	u	61	58	0

Fine, wind N. Cloudy, wind E. Thunderstorm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

8 A.M. APRIL 18 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·8*s.* *E.*

Average Annual Rainfall for 26 years .....59·243.
Average for 2 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 18 — 8·021
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	c	80	51	0
Moree....	b	84	57	0
Grafton..	b	87	57	0
Gl'n Inn's	b	65	44	0
Inverell..	b	66	45	0
Bourke..	b	73	48	0
Narrabri	b	75	43	0
Armidalc	b	75	44	0
B'ndem'r.	b	61	35	0
Gunned'h	b	68	54	0
C'namble	b	—	—	0
Lismore..	–	—	—	0
Walcha..	–	—	—	—
Tamw'rth	b	67	42	0
Coonab'n	b	69	39	0
P.M'cqrie	q	62	57	0·16
W'lcannia	b	—	—	0
M'rr'r'ndi	g	60	52	0
Taree....	p	75	52	0·04
Cassilis..	b	68	49	0
M'ss'lbr'k	o	68	54	0
Dubbo...	b	70	42	0
Menindie.	b	70	51	0
Singleton	b	64	57	0
N'ls'n sB	b	71	57	0·25
28 72				
Mudg'	b	81	37	0
Ma tland.	u	70	56	0
Hill End.	g	—	—	0
N'wcastle	q	66	57	0
Orange..	c	58	38	0
Bathurst	c	64	37	0
Forbes...	b	60	43	0
M.V'ct'ria	g	51	42	0
Carcoar..	g	57	46	0
Cond'b'l'n	b	55	36	0
Marsdens	b	68	51	0
Picton...	g	66	54	0
Sydney..	p	65	56	0·39
Wentw'th	b	73	43	0
Young...	c	80	42	0
Woll'g'ng	g	68	55	0·14
Taralga..	u	66	40	0
Hay.....	b	69	46	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	c	60	46	0·45
Deniliquin..	b	70	40	0
Moruya....	g	67	55	0
Kiandra...	c	49	31	0
Albury	b	72	46	0
Bodalla....	c	69	52	0
Cooma	g	57	42	0
Eden.....	b	—	—	0

M ss V'l	c	55	46	0·08
Euston	b	79	41	0
G'lb'rn	g	64	44	0
Wagga.	b	69	40	0
C. Geo.	c	74	55	0

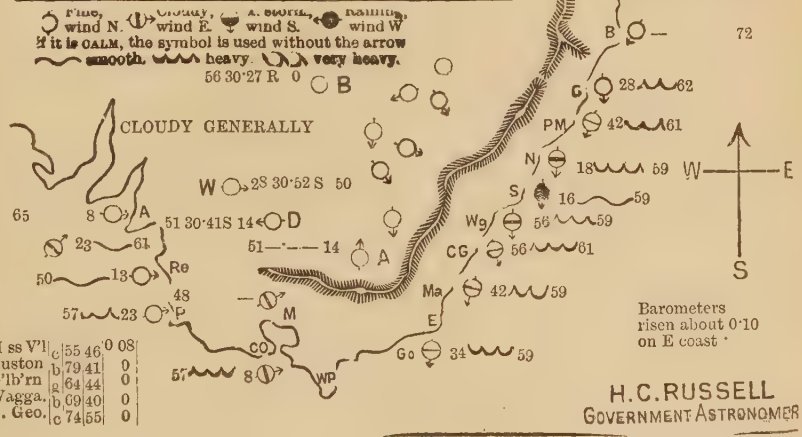
AS 13 30·40 R 60

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. A. storm, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



TIME BALL
Drops at 1 p.m. S M T
or 2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers risen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 20 1885

Sydney Observatory.

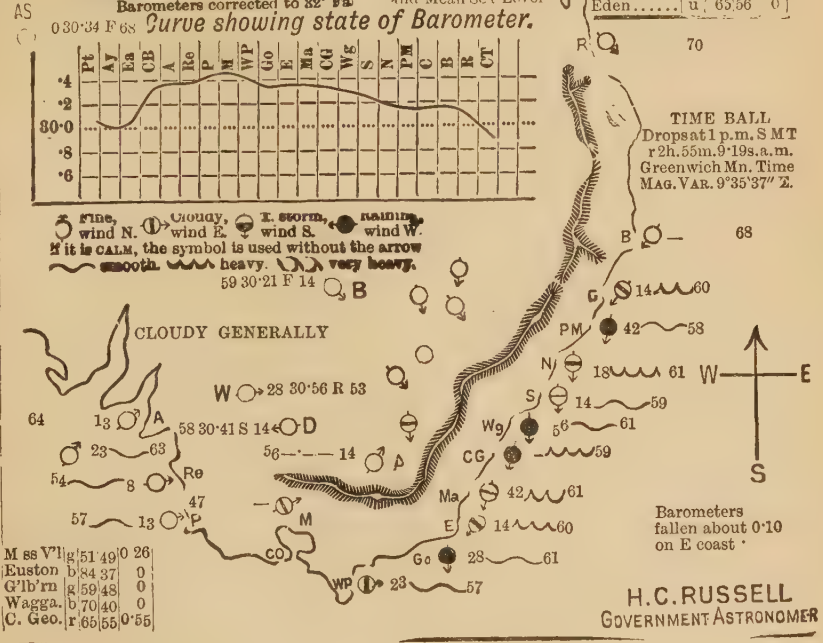
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 24 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 20 — 8·635
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	c	77	51	0·15
Moree....	b	95	50	0
Grafton..	b	80	53	0
Gl'n Inn's	b	69	44	0
Inverell..	b	68	45	0
Bourke ..	b	76	51	0
Narrabri	b	70	42	0
Armidalc	c	61	54	0
B'ndem'r.	g	64	35	0
Gunned'h	b	69	54	0
C'namble	b	—	—	0
Lismore..	–	—	—	—
Walcha ..	g	57	48	0
Tamw'rth	b	68	45	0
Coonab'n	b	71	47	0
P.M'cqrie	r	89	57	1·69
W'lcannia	–	—	—	—
M'rr'r'ndi	u	62	52	0
Taree....	r	69	57	0·31
Cassilis ..	b	62	48	0
M'ss'lbr'k	g	68	57	0
Dubbo...	–	—	—	-
Meniudie.	b	72	51	0
Singleton	c	68	53	0
N'ls'n sB	c	76	60	0·40
34 74				
Mudg	g	78	39	0
Ma tland.	g	70	59	0
Hill End.	b	—	—	0
N'wcastle	q	63	58	0·54
Orange ..	c	58	42	0
Bathurst	c	62	35	0
Forbes...	b	63	43	0
M.V'ct'ria	r	52	42	0·12
Carcoar..	b	59	49	0
Cond'b'l'n	–	—	—	—
Marsdens	b	68	51	0
Picton...	u	64	55	0
Sydney ..	u	64	56	0·61
Wentw'th	b	77	43	0
Young...	b	74	41	0
Woll'g'ng	p	62	55	0·30
Taralga..	u	71	40	0
Hay	b	69	49	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	c	60	40	0
Deniliquin.	b	74	40	0
Moruya....	g	67	57	0
Kiandra...	u	48	31	0
Albury	b	74	48	0
Bodalla....	–	—	—	—
Cooma	u	59	45	0·03
Eden.....	u	65	56	0

M ss V'l	g	51	49	0 26
Euston	b	84	37	0
G'lb'rn	g	59	48	0
Wagga.	b	70	40	0
C. Geo.	r	65	55	0·55



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

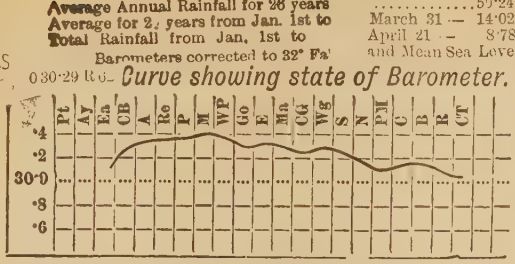
9 A.M. APRIL 21 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10*h.* 4*m.* 50·61*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 21 — 8·784
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Curve showing state of Barometer.



Fine, wind N — Cloudy, wind E — Rain, wind S — Storm, wind W

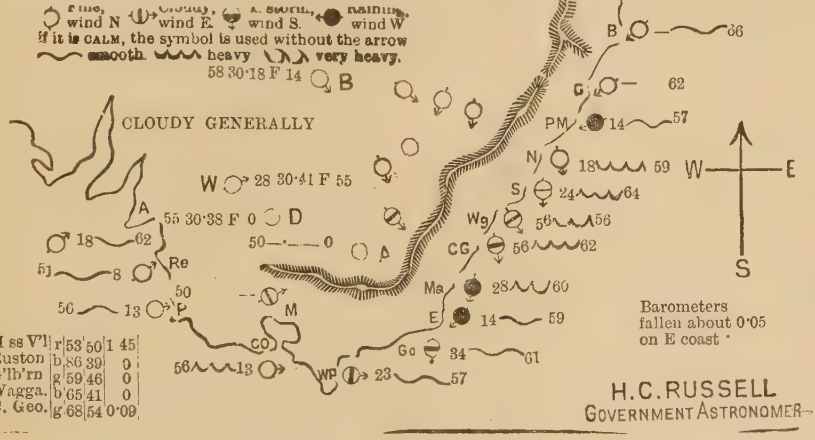
If it is CALM, the symbol is used without the arrow

smooth — heavy — very heavy.

Stations.	wt	M'x	Mn	R'in
Casino ...	–	–	–	—
T'nt'rfield	c	72	39	0·13
Clarence .	–	...	–	—
Moree....	b	86	50	0
Grafton ..	b	93	56	0
Gl'n Inn's	b	68	57	0
Inverell..	b	69	44	0
Bourke ..	b	78	51	0
Narrabri	b	76	46	0
Armidale	–	–	–	—
B'ndem'r.	g	67	40	0
Gunned'h	g	70	55	0
C'nambla	b	–	–	0
Lismore..	–	–	–	—
Walcha ..	u	61	46	0·03
Tamw'rth	b	68	46	0
Coonab'n	b	70	42	0
P.M'cqrie	p	68	53	0·93
W'lcannia	b	—	—	0
M'rr'r'ndi	o	62	53	0
Taree....	g	70	56	0·15
Cassilis ..	b	63	52	0
M'ss'lbr'k	o	68	57	–
Dubbo. ..	b	74	43	0
Menindie.	b	73	54	0
Singleton	u	62	56	0·03
N'ls'n sB	–	—	—	—
Mudg'	b	76	41	0
Ma tland.	–	–	–	—
Hill End.	g	—	–	0
N'wcastle	b	65	56	0·36
Orange ..	g	59	44	0
Bathurst	c	62	44	0
Forbes...	b	70	40	0
M.V'ct'ria	g	60	44	0·37
Carcoar..	b	58	52	0
Cond'b'l'n	b	57	37	0
Marsdens	b	69	52	0
Picton. ..	u	62	51	0·07
Sydney ..	g	74	59	0·15
Wentw'th	b	79	44	0
Young. ..	b	72	42	0
Woll'g'ng	g	68	56	0·55
Taralga...	r	63	45	0·10
Hay	b	77	49	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	c	62	51	0
Deniliquin .	b	75	45	0
Moruya....	r	66	54	0·08
Kiandra...	g	48	35	0
Albury	b	74	42	0
Bodalla....	g	70	54	0
Cooma	g	82	46	0
Eden.....	p	67	59	0·01

M ss V'l	r	53	50	1·45
Euston	b	86	39	0
G'lb'rn	g	59	46	0
Wagga.	b	65	41	0
C. Geo.	g	68	54	0·09



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 22 1885

Sydney Observatory.

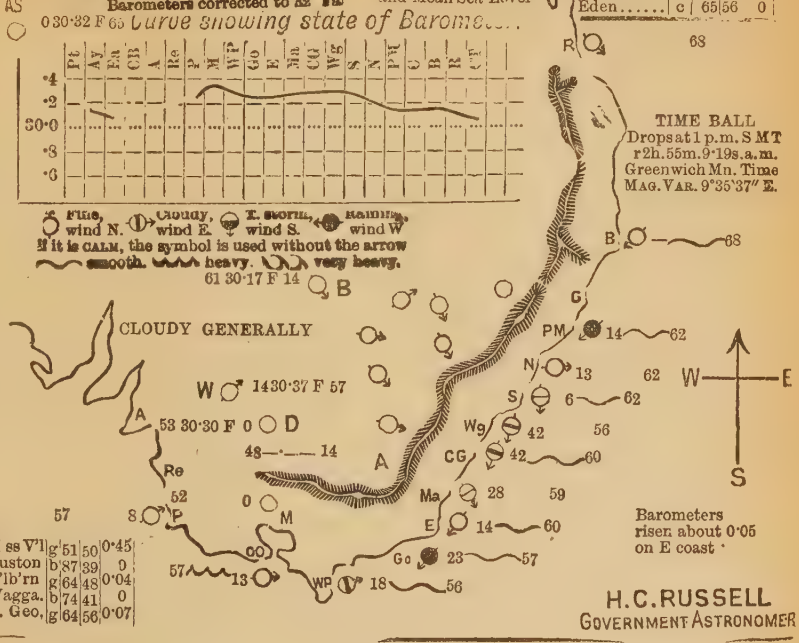
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·81s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 22 — 8·881
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	77	44	0
T'nt'rfield	c	68	39	0
Clarence.	—	—	—	—
Moree....	b	84	51	0
Grafton..	u	88	58	0
Gl'n Inn's	b	65	42	0
Inverell..	—	—	—	—
Bourke ..	b	76	50	0
Narrabri	—	—	—	—
Armidalc	c	59	42	0
B'ndem'r.	g	68	39	0·07
Gunned'h	b	68	53	0
C'namble	b	—	—	0
Lismore..	c	76	55	0
Walcha..	d	59	48	0·03
Tamw'rth	b	66	43	0
Coonab'n	b	67	37	0
P.M'cqrie	p	66	56	0·73
W'lcannia	b	—	—	0
M'rr'r'ndi	o	59	52	0
Taree....	c	70	57	1·17
Cassilis ..	b	63	56	0
M'ss'lbr'k	g	66	57	0
Dubbo. ..	b	74	52	0
Menindie.	b	74	53	0
Singleton	b	67	59	0
N'ls'n sB.	b	79	52	0·48
13 63 Mudg	b	76	41	0
Ma tland.	g	86	58	0·28
Hill End.	b	—	—	0
N'wcastle	c	65	58	1·24
Orange ..	b	60	43	0
Bathurst	b	62	42	0
Forbes...	—	—	—	—
M.V'ct'ria	g	53	46	0
Carcoar..	b	60	54	0
Cond'b'l'n	b	57	38	0
Marsdens	b	68	53	0
Picton. ..	g	66	48	0·04
Sydney ..	c	67	60	0
Wentw'th	b	82	45	0
Young. ..	c	74	42	0
Woll'g'ng	c	68	56	0·17
Taralga..	g	59	40	0·08
Hay	b	75	51	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	c	62	43	0
Deniliquin.	b	79	41	0
Moruya....	g	69	57	0
Kiandra...	n	49	36	0
Albury	b	74	44	0
Bodalla....	g	70	54	0
Cooma	g	54	38	0
Eden.....	c	65	56	0

M ss V'l	g	51	50	0·45
Euston	b	87	39	0
G'lb'rn	g	64	48	0·04
Wagga.	b	74	41	0
C. Geo.	g	64	56	0·07



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 23 1885

Sydney Observatory.

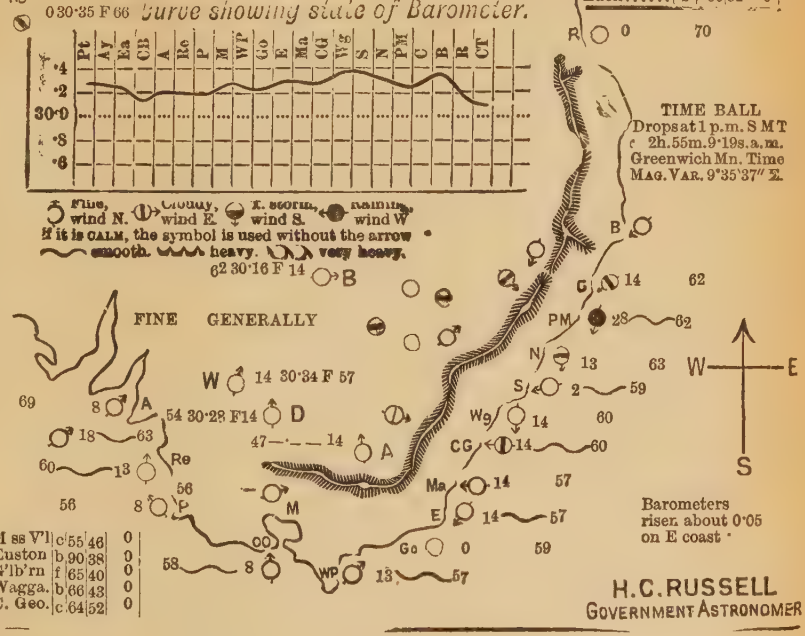
Lat. 33° 51′ 41″ S.; *Long.* 10h. 4m. 50·9s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 24 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 23 — 8·883
Barometers corrected to 32° Fah and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	78	48	0·14
T'nt'rfield	c	67	52	0
Clarence.	c	78	52	1·39
Moree....	b	86	55	0
Grafton..	g	75	48	0
Gl'n Inn's	u	72	48	0
Inverell..	b	70	58	0
Bourke ..	b	77	52	0
Narrabri	g	70	43	0
Armidalc	c	61	56	0·03
B'ndem'r.	g	60	44	0
Gunned'h	c	72	53	0
C'namble	–	–	–	—
Lismore..	c	76	61	0
Walcha ..	d	62	49	0
Tamw'rth	–	–	–	—
Coonab'n	b	71	48	0
P.M'cqrie	p	72	56	0·67
W'lcannia	b	—	—	0
M'rr'r'ndi	f	65	50	0
Taree....	–	–	–	—
Cassilis ..	b	66	63	0
M'ss'lbr'k	g	70	59	0
Dubbo. ..	b	76	48	0
Menindie.	b	75	52	0
Singleton	u	69	58	0
N'ls'n sB	g	70	56	0·30
Mudg	b	78	44	0
Ma tland.	g	68	58	0
Hill End.	b	—	—	0
N'wcastle	g	66	58	0·32
Orange ..	c	61	44	0
Bathurst	b	63	33	0
Forbes...	c	71	44	0
M.V'ct'ria	b	61	44	0
Carcoar..	b	61	55	0
Cond'b'l'n	c	57	40	0
Marsdens	b	73	55	0
Picton. ..	c	66	47	0
Sydney ..	c	66	54	0
Wentw'th	b	81	46	0
Young. ..	c	86	47	0
Woll'g'ng	b	69	50	0
Taralga..	u	63	37	0
Hay	b	77	51	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	g	61	48	0
Deniliquin.	b	79	42	0
Moruya....	b	66	50	0
Kiandra...	n	59	22	0
Albury	b	74	43	0
Bodalla....	b	66	39	0
Cooma	f	67	33	0
Eden.....	b	66	51	0

M ss V'l	c	55	46	0
Euston	b	90	38	0
G'lb'rn	f	65	40	0
Wagga.	b	66	43	0
C. Geo.	c	64	52	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 24 1885

Sydney Observatory.

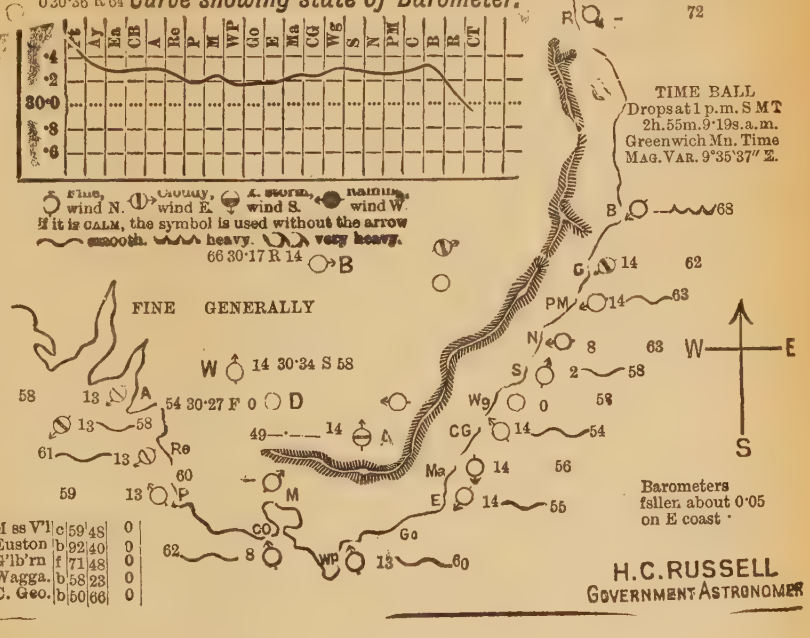
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 24 — 8·884
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	w't	m'x	MN	R'in
Casino ...	b	78	57	0
T'nt'rfield	–	—	—	—
Clarence.	c	79	53	0
Moree....	g	88	53	0
Grafton..	c	80	50	0
Gl'n Inn's	c	73	49	0
Inverell..	b	71	45	0
Bourke ..	b	87	55	0
Narrabri	c	73	48	0
Armidalc	b	63	55	0
B'ndem'r.	n	67	41	0
Gunned'h	b	74	54	0
C'namble	b	--	—	0
Lismore..	b	76	56	0
Walcha ..	f	64	47	0
Tamw'rth	b	76	47	0
Coonab'n	b	76	41	0
P.M'cqrie	b	74	55	0
W'lcannia	–	—	—	—
M'rr'r'ndi	b	66	46	0
Taree....	b	71	52	0
Cassilis ..	b	65	58	0
M'ss'lbr'k	g	65	61	0
Dubbo. ..	b	80	46	0
Menindie.	b	78	53	0
Singleton	b	70	52	0
N'ls'n sB	b	79	51	0·03
28 65				
Mudg	n	83	38	0
Ma tland.	b	70	50	0
Hill End.	b	—	—	0
N'wcastle	b	70	55	0
Orange ..	b	62	39	0
Bathurst	b	71	36	0
Forbes...	b	74	44	0
M.V'ct'ria	c	60	49	0
Carcoar..	b	62	46	0
Cond'b'l'n	b	57	38	0
Marsdens	c	76	54	0
Picton. ..	b	68	48	0
Sydney ..	b	66	53	0
Wentw'th	b	84	45	0
Young. ...	c	87	41	0
Woll'g'ng	b	71	48	0
Taralga..	n	73	38	0
Hay	b	80	47	0

Stations.	w't	m'x	MN	R'in
Qeaunbey'n'	b	61	44	0
Deniliquin.	b	80	44	0
Moruya....	b	71	48	0
Kiandra...	c	58	23	0
Albury	b	75	44	0
Bodalla....	b	74	37	0
Cooma	g	69	32	0
Eden.....	b	64	55	0

M ss V'l	c	59	48	0
Euston	b	92	40	0
G'lb'rn	f	71	48	0
Wagga.	b	58	23	0
C. Geo.	b	50	66	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 25 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 25 — 8·886
Barometers corrected to 32° Fah. and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino...	b	84	56	0
T'nt'rfield	–	—	—	—
Clarence.	c	83	54	0
Moree....	b	86	52	0
Grafton..	b	88	53	0
Gl'n Inn's	f	73	47	0
Inverell..	b	71	44	0
Bourke ..	b	91	45	0
Narrabri	b	70	46	0
Armidalc	b	76	52	0
B'ndem'r.	g	60	27	0
Gunned'h	b	77	53	0
C'namble	b	—	—	0
Lismore..	c	80	60	0
Walcha..	b	65	32	0
Tamw'rth	–	—	—	—
Coonab'n	b	80	37	0
P.M'cqrie	b	73	54	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	67	45	0
Taree....	b	74	52	0
Cassilis ..	b	68	43	0
M'ss'lbr'k	–	—	—	0
Dubbo. ..	b	82	42	—
Menindie.	b	81	59	0
Singleton	b	72	53	0
N'ls'n sB	b	81	55	0
23 62				
Mudg	b	84	37	0
Ma tland.	b	68	50	0
Hill End.	b	—	—	0
N'wcastle	b	67	—	0
Orange ..	b	63	38	0
Bathurst	b	72	31	0
Forbes...	b	76	45	0
M.V'ct'ria	b	60	49	0
Carcoar..	–	—	—	—
Cond'b'l'n	c	58	39	0
Marsdens	b	78	55	0
Picton...	b	71	41	0
Sydney ..	b	67	59	0
Wentw'th	c	84	51	0
Young...	b	88	42	0
Woll'g'ng	b	74	50	0
Taralga..	b	73	40	0
Hay.....	b	81	43	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	63	43	0
Deniliquin.	b	81	44	0
Moruya....	c	70	51	0
Kiandra...	n	58	25	0
Albury	b	77	47	0
Bodalla....	h	76	41	0
Cooma	c	72	34	0
Eden.....	b	65	31	0

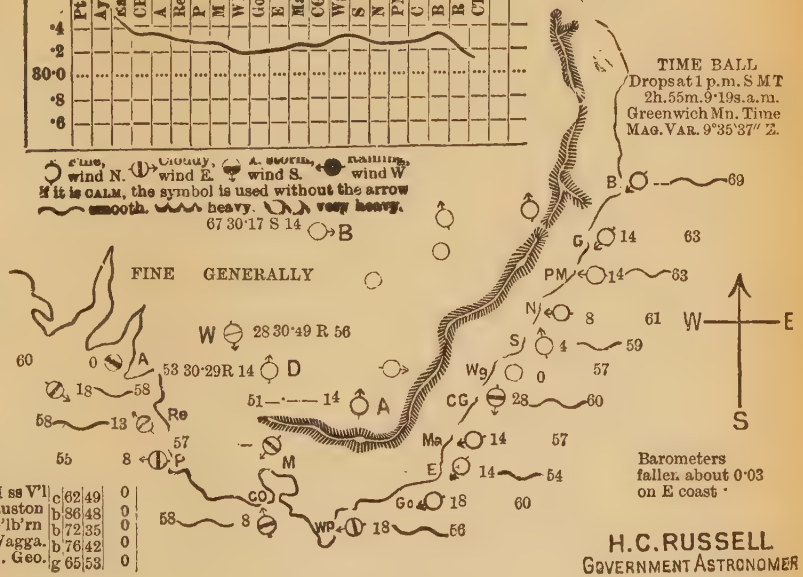
Stations.	wt	m'x	mn	R'in
M ss V'l	c	62	49	0
Euston	b	86	48	0
G'lb'rn	b	72	35	0
Wagga.	b	76	42	0
C. Geo.	g	65	53	0

AS 0 30·43 R 6

Curve showing state of Barometer.

	Pt	Ay	Ka	CB	A	Ec	P	M	WP	Go	E	Ma	CG	Wg	S	N	PM	C	B	R	CT
·4																					
·2																					
30·0																					
·8																					
·6																					

Fine, wind N. Cloudy, wind E. A. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 26 1885

Sydney Observatory.

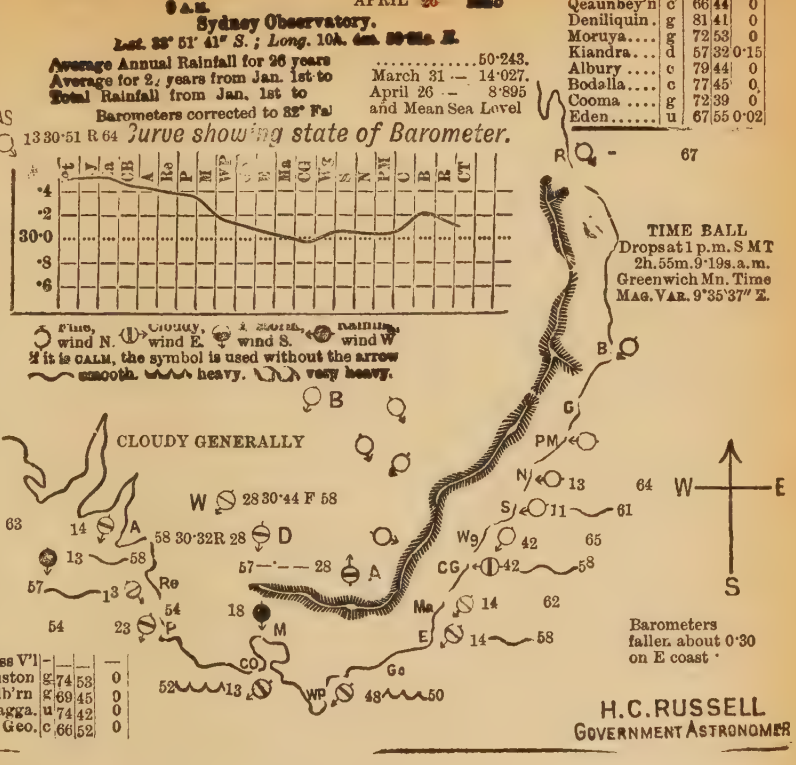
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 26 — 8·895
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	–	—	—	—
Moree....	–	—	—	—
Grafton..	b	88	57	0·03
Gl'n Inn's	b	73	35	0
Inverell..	b	70	41	0
Bourke..	b	80	51	0
Narrabri	–	—	—	—
Armidale	–	—	—	—
B'ndem'r.	–	—	—	—
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	c	81	55	0·27
Walcha..	–	—	—	—
Tamw'rth	–	—	—	—
Coonab'n	b	76	47	0
P.M'cqrie	b	76	55	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	69	46	0
Taree....	–	—	—	—
Cassilis..	b	68	43	0
M'ss'lbr'k	b	69	53	0
Dubbo...	b	80	41	0
Menindie.	b	80	53	0
Singleton	b	73	54	0
N'ls'n sB.	b	80	54	0
8 62				
Mudg	b	83	38	0
Ma tland.	b	72	51	0
Hill End.	b	—	—	0
N'wcastle	b	73	56	0
Orange..	c	63	43	0
Bathurst	u	72	31	0
Forbes...	b	73	48	0
M.V'ct'ria	b	63	45	0
Carcoar..	g	61	44	0
Cond'b'l'n	b	54	35	0
Marsdens	c	73	54	0
Picton...	c	74	46	0
Sydney..	b	71	57	0
Wentw'th	u	72	53	0
Young...	g	91	46	0
Woll'g'ng	b	77	58	0
Taralga..	b	71	40	0
Hay.....	u	80	48	0

Stations.	wt	m'x	mn	R'in
Qeaunbey'n	c	66	44	0
Deniliquin.	g	81	41	0
Moruya....	g	72	53	0
Kiandra...	d	57	32	0·15
Albury	c	79	44	0
Bodalla....	c	77	45	0
Cooma	g	72	39	0
Eden.....	u	67	55	0·02

M ss V'l	–	—	—	—
Euston	g	74	53	0
G'lb'rn	g	69	45	0
Wagga.	u	74	42	0
C. Geo.	c	66	52	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

APRIL 28 1885.

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·8s. E.

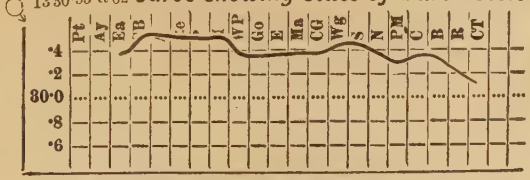
Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 28 — 8·900

Barometers corrected to 32° Fa[illegible] and Mean Sea Level

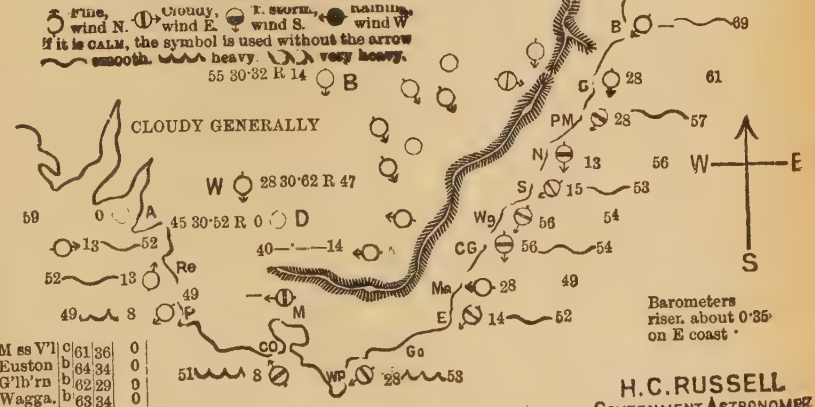
Stations.	wt	m'x	mn	R'in
Casino ...	b	82	53	0
T'nt'rfield	c	69	40	0
Clarence .	c	80	51	0
Moree....	b	81	48	0
Grafton..	c	89	54	0
Gl'n Inn's	n	68	38	0
Inverell..	b	61	42	0
Bourke ..	b	73	49	0
Narrabri	b	67	44	0
Armidale	b	60	52	0
B'ndem'r.	b	68	36	0
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	b	82	60	0
Walcha ..	c	64	42	0
Tamw'rth	b	72	41	0
Coonab'n	b	70	69	0
P.M'cqrie	c	77	53	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	68	45	0
Taree....	b	77	56	0
Cassilis ..	–	—	—	—
M'ss'lbr'k	b	70	48	0
Dubbo. ..	b	72	42	0
Menindie.	b	70	48	0
Singleton	b	70	51	0
N'ls'n sB	g	79	52	0·03
8 61				
Mudg	b	80	38	0
Ma tland.	b	72	50	0
Hill End .	b	—	—	0
N'wcastle	c	75	51	0·01
Orange ..	b	58	35	0
Bathurst	b	61	32	0
Forbes...	b	68	39	0
M.V'ct'ria	b	52	36	0
Carcoar..	n	67	40	0
Cond'b'l'n	b	50	32	0
Marsdens	b	67	46	0
Picton. ..	g	70	36	0
Sydney ..	g	73	50	0·01
Wentw'th	b	71	40	0
Young. ..	b	76	34	0
Woll'g'ng	c	74	48	0
Taralga..	b	61	28	0
Hay	b	79	41	0

Stations.	wt	m'x	mn	R'in
Qeaunbey'n	c	63	37	0
Deniliquin .	b	68	34	0
Moruya....	b	66	41	0
Kiandra...	n	49	25	0
Albury	b	69	35	0
Bodalla....	b	65	35	0
Cooma	c	59	30	0
Eden.....	c	59	49	0·01
R	–		—	

M ss V'l	c	61	36	0
Euston	b	64	34	0
G'lb'rn	b	62	29	0
Wagga.	b	63	34	0
C. Geo.	c	55	47	0



Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 29 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·4s. *E.*

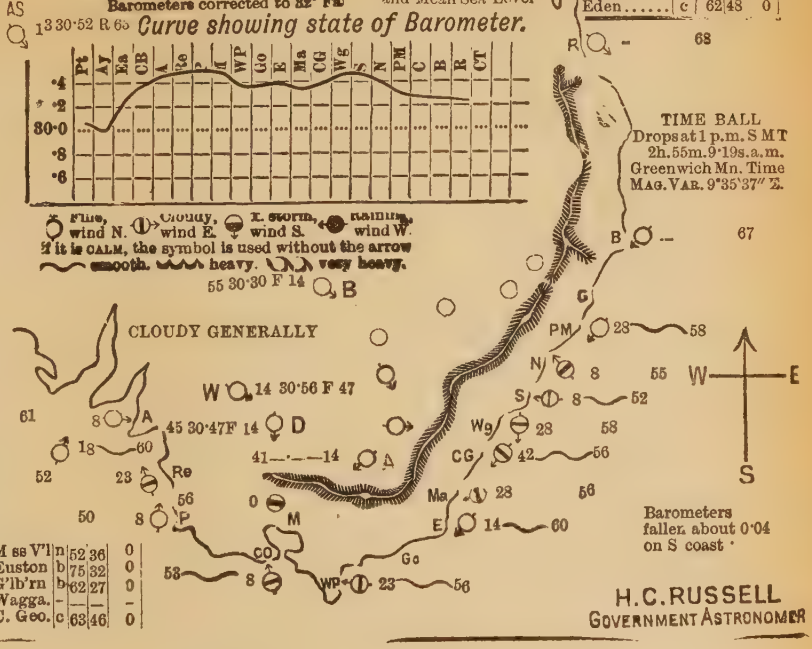
Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 29 — 8·830
and Mean Sea Level

Barometers corrected to 32° Fa

Stations.	wt	M'x	Mn	R'in
Casino ...	b	75	46	0
T'nt'rfield	b	67	35	0
Clarence.	-	—	—	—
Moree....	-	—	—	—
Grafton..	b	80	47	0
Gl'n Inn's	b	70	36	0
Inverell..	b	66	42	0
Bourke ..	b	72	46	0
Narrabri	-	—	—	—
Armidalc	n	69	38	0
B'ndem'r.	n	67	31	0
Gunned'h	-	—	—	—
C'namble	b	—	—	0
Lismore..	c	74	57	0
Walcha ..	n	57	29	0
Tamw'rth	-	—	—	—
Coonab'n	n	65	28	0
P.M'cqrie	b	67	51	0
W'lcannia	b	—	—	0
M'rr'r'ndi	-	—	—	—
Taree....	b	66	50	0
Cassilis ..	b	61	36	0
M'ss'lbr'k	b	65	42	0
Dubbo. ..	b	68	35	0
Menindie.	b	66	44	0
Singleton	b	61	46	0
N'ls'n sB	c	68	47	0
18 66				
Mudg	b	78	29	0
Ma tland.	b	67	43	0
Hill End.	b	—	—	0
N'wcastle	g	64	49	0
Orange ..	n	55	31	0
Bathurst	b	43	24	0
Forbes...	b	70	45	0
M.V'ct'ria	b	55	39	0
Carcoar..	n	55	36	0
Cond'b'l'n	-	—	—	—
Marsdens	n	65	45	0
Picton...	b	61	35	0
Sydney ..	g	62	48	0
Wentw'th	b	70	37	0
Young...	b	81	32	0
Woll'g'ng	c	66	50	0
Taralga..	n	63	25	0
Hay	b	78	40	0

Stations.	wt	M'x	Mn	R'in
M ss V'l'n	n	52	36	0
Euston	b	75	32	0
G'lb'rn	b	62	27	0
Wagga.	-	—	—	-
C. Geo.	c	63	46	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	n	56	36	0
Deniliquin.	b	68	37	0
Moruya....	g	65	48	0
Kiandra...	n	52	20	0
Albury	b	67	36	0
Bodalla....	g	71	39	0
Cooma	g	60	35	0
Eden.....	c	62	48	0



Barometers fallen about 0·04 on S coast

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. APRIL 30 1885

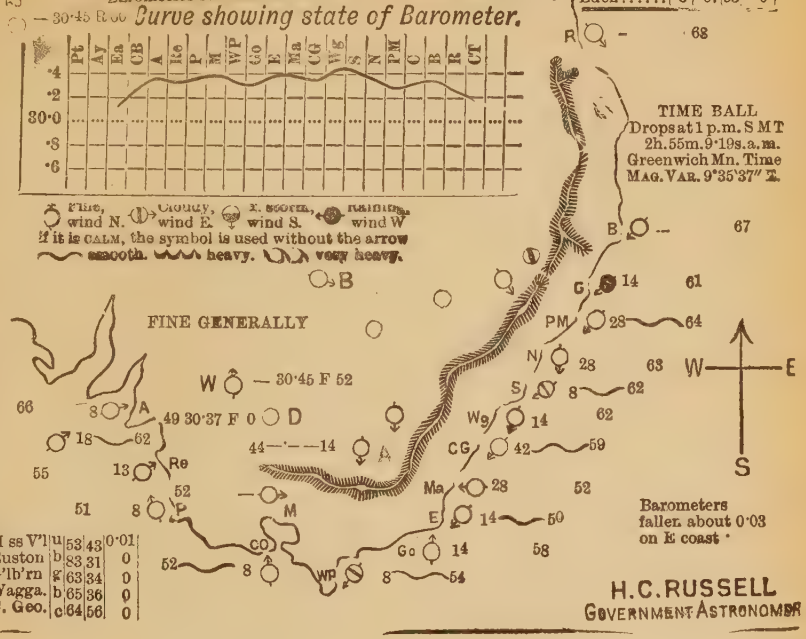
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to March 31 — 14·027.
Total Rainfall from Jan. 1st to April 30 — 8·830
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino...	c	78	45	0
T'nt'rfield	c	72	31	0
Clarence.	p	78	50	0
Moree....	b	65	47	0
Grafton..	b	86	54	0
Gl'n Inn's	n	76	37	0
Inverell..	b	66	42	0
Bourke..	b	78	48	0
Narrabri	b	70	41	0
Armidale	b	67	38	0
B'ndem'r.	n	68	35	0
Gunned'h	—	—	—	—
C'namble	b	—	—	0
Lismore..	c	76	54	0
Walcha..	c	64	36	0
Tamw'rth	b	72	38	0
Coonab'n	n	72	30	0
P.M'cqrie	b	71	57	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	60	42	0
Taree....	c	70	57	0
Cassilis..	b	58	41	0
M'ss'lbr'k	g	65	47	0
Dubbo...	b	74	47	0
Menindie.	b	69	49	0
Singleton	b	67	51	0
N'ls'n sB	p	71	51	0·33
28 61				
Mudg	b	78	40	0
Ma tland.	g	68	52	0
Hill End.	b	—	—	0
N'wcastle	c	66	50	0·01
Orange..	b	59	38	0
Bathurst	b	68	28	0
Forbes...	b	67	34	0
M.V'ct'ria	u	56	46	0
Carcoar..	b	55	49	0
Cond'b'l'n	b	51	31	0
Marsdens	n	70	50	0
Picton...	o	63	40	0
Sydney..	c	69	53	0
Wentw'th	b	75	41	0
Young...	b	83	38	0
Woll'g'ng	b	70	56	0
Taralga..	u	71	40	0
Hay.....	b	78	44	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	58	38	0
Deniliquin.	b	72	30	0
Moruya....	b	69	47	0
Kiandra...	n	55	29	0
Albury	b	72	35	0
Bodalla....	b	73	36	0
Cooma	n	67	28	0
Eden.....	c	67	53	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

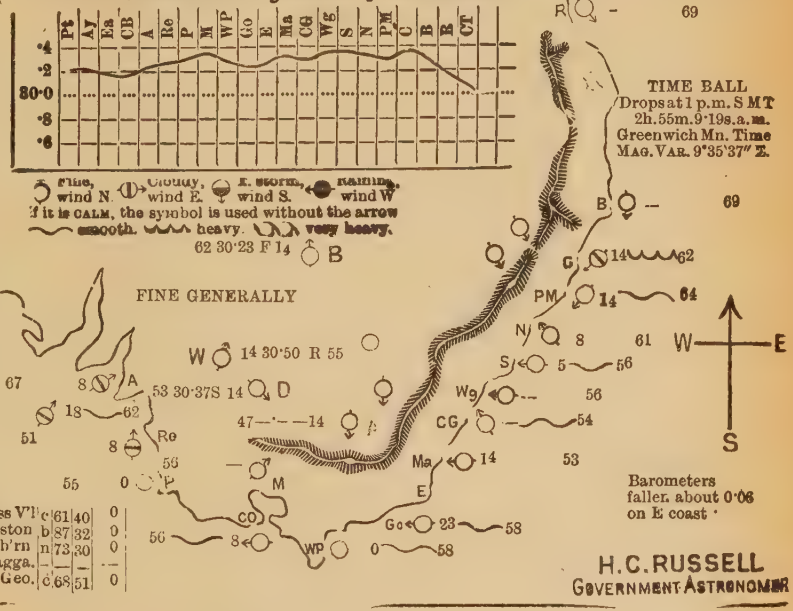
9 A.M. MAY 1 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 — 20·582.
Total Rainfall from Jan. 1st to May 1 — 8·833
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

AS — 30·36 R 63 *Curve showing state of Barometer.*



Stations.	w't	m'x	mn	R'in
Casino ...	c	79	53	0
T'nt'rfield	b	68	40	0
Clarence.	u	74	54	0·02
Moree....	b	88	52	0
Grafton..	u	81	55	0
Gl'n Inn's	b	71	40	0
Inverell..	b	71	42	0
Bourke ..	b	80	50	0
Narrabri	c	68	45	0
Armidalc	b	61	51	0
B'ndem'r.	b	61	36	0
Gunned'h	b	72	51	0
C'namble	b	—	—	0
Lismore..	c	76	59	0·01
Walcha ..	c	62	39	0
Tamw'rth	b	74	41	0
Coonab'n	b	75	35	0
P.M'cqrie	b	74	56	0
W'lcannia	b	—	—	0
M'rr'r'ndi	f	63	43	0
Taree....	b	73	57	0
Cassilis ..	f	62	45	0
M'ss'lbr'k	f	67	47	0
Dubbo. ..	b	77	42	0
Menindie.	b	73	47	0
Singleton	f	70	51	0
N'ls'n sB.	b	75	50	0·05
28 74				
Mudg'	f	81	37	0
Ma tland.	b	70	48	0
Hill End.	b	—	—	0
N'wcastle	b	68	54	0
Orange ..	b	60	36	0
Bathurst	b	71	28	0
Forbes...	b	70	46	0
M.V'ct'ria	b	60	44	0
Carcoar..	–	—	—	—
Cond'b'l'n	b	54	32	0
Marsdens	c	75	52	0
Picton...	b	69	41	0
Sydney ..	b	68	53	0
Wentw'th	b	80	42	0
Young...	b	87	36	0
Woll'g'ng	b	73	47	0
Taralga..	b	76	32	0
Hay	b	78	42	0

Stations.	w't	m'x	mn	R'in
Qeaunbey'n	c	61	42	0
Deniliquin.	b	78	44	0
Moruya....	b	70	45	0
Kiandra...	n	42	24	0
Albury	b	75	41	0
Bodalla....	b	77	34	0
Cooma	n	74	28	0
Eden.....	–	—	—	—

M ss V'l'c	c	61	40	0
Euston	b	87	32	0
G'lb'rn	n	73	30	0
Wagga.	–	—	—	—
C. Geo.	c	68	51	0

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

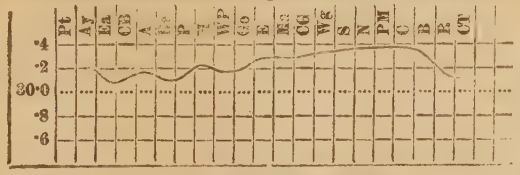
9 A.M. MAY 2 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·6s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2.. years from Jan. 1st to April 30 — 20·582.
Total Rainfall from Jan. 1st to May — 8·833
Barometers corrected to 32° Fa and Mean Sea Level

— 30·34 F 6. *Curve showing state of Barometer.*



Fine, wind N — Cloudy, wind E — Storm, wind S — Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

63 30·21 F 14 B

FINE GENERALLY

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·12s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E

Barometers fuller. about 0·05 on S. coast.

H.C.RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	M'x	Mn	R'in
Casino ...	b	77	50	0
T'nt'rfield	c	68	47	0
Clarence .	b	75	56	0
Moree....	b	87	52	0
Grafton ..	g	86	56	0
Gl'n Inn's	b	74	46	0
Inverell..	b	71	40	0
Bourke ..	b	73	52	0
Narrabri	b	71	45	0
Armidale	b	62	53	0
B'ndem'r.	b	70	56	0
Gunned'h	-	--	—	—
C'namble	b	-	—	0
Lismore..	b	63	61	0
Walcha ..	o	65	40	0
Tamw'rth	b	76	44	0
Coonab'n	b	78	36	0
P.M'cqrie	b	74	55	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	66	41	0
Taree....	b	76	52	0
Cassilis ..	f	54	46	0
M'ss'lbr'k	f	68	49	0
Dubbo. ..	b	68	54	0
Menindie.	-	—	—	—
Singleton	f	70	51	0
N'ls'n sB	b	73	51	0
28 61				
Mudg	b	85	34	0
Ma tland.	g	68	49	0
Hill End.	b	—	—	0
N'wcastle	b	71	57	0
Orange ..	-	—	—	—
Bathurst	b	74	28	0
Forbes. ..	b	72	40	0
M.V'ct'ria	b	65	51	0
Carcoar..	b	62	44	0
Cond'b'l'n	c	52	35	0
Marsdens	n	76	51	0
Picton. ..	-	-	—	—
Sydney ..	b	69	51	0
Wentw'th	b	83	47	0
Young. ..	h	94	41	0
Woll'g'ng	b	76	46	0
Taralga..	n	73	48	0
Hay	u	82	53	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	65	41	0
Deniliquin.	c	81	45	0
Morn...	h	69	49	0
Kiel...	u	59	28	0
Albury	g	78	46	0
Bodalla....	g	77	38	0
Cooma	n	78	31	0
Eden.....	b	65	56	0

Stations.	wt	M'x	Mn	R'in
M ss V'll	b	63	42	0
Euston	g	90	45	0
G'lb'rn	b	78	32	0
Wagga.	h	77	40	0
C. Geo.	b	69	51	0

METEOROLOGY.

9 A.M. MAY 4 1885

Sydney Observatory.

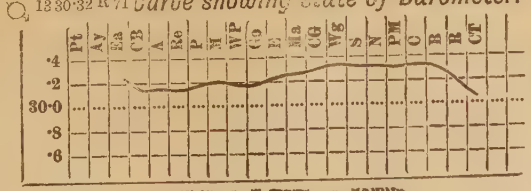
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·6s. *E.*

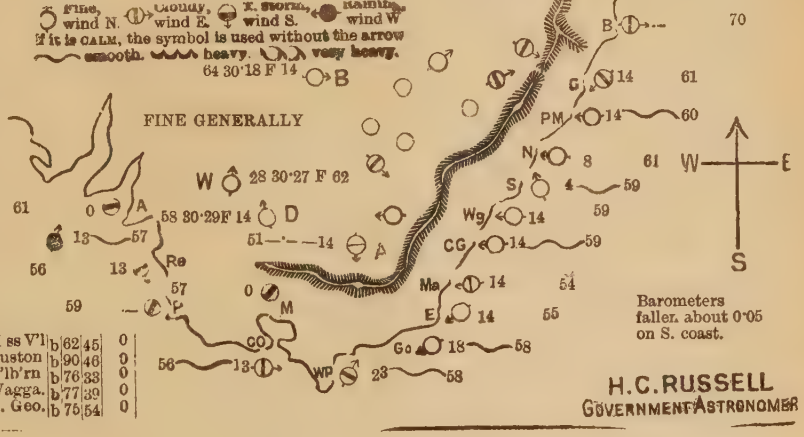
Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 — 20·582.
Total Rainfall from Jan. 1st to May 4 — 8·835
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	c	81	46	0
T'nt'rfield	o	83	44	0
Clarence .	o	81	54	0
Moree....	b	95	52	0
Grafton..	c	86	56	0
Gl'n Inn's	f	76	44	0
Inverell..	b	71	43	0
Bourke ..	b	88	55	0
Narrabri	b	70	44	0
Armidalc	b	64	51	0
B'ndem'r.	b	69	34	0
Gunned'h	b	73	48	0
C'namble	b	—	—	0
Lismore..	b	76	62	0
Walcha ..	f	70	32	0
Tamw'rth	b	76	41	0
Coonab'n	b	79	36	0
P.M'cqrie	b	74	52	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	71	47	0
Taree....	b	76	47	0
Cassilis ..	b	69	46	0
M'ss'lbr'k	b	72	47	0
Dubbo. ...	—	—	—	—
Menindie.	b	84	57	0
Singleton	b	75	51	0
N'ls'n sB	b	76	51	0
13 63 Mudg	—	—	—	—
Ma tland.	b	72	48	0
Hill End.	b	—	—	0
N'wcastle	b	79	52	0
Orange ..	h	63	38	0
Bathurst	b	74	32	0
Forbes...	b	75	43	0
M.V'ct'ria	b	70	57	0
Carcoar..	b	63	43	0
Cond'b'l'n	b	56	36	0
Marsdens	c	79	55	0
Picton...	b	77	41	0
Sydney ..	b	74	54	0
Wentw'th	b	89	52	0
Young. ...	m	88	41	0
Woll'g'ng	b	77	51	0
Taralga..	b	76	45	0
Hay	b	79	51	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	66	41	0
Deniliquin .	b	82	46	0
Moruya....	b	73	48	0
Kiandra...	b	60	25	0
Albury	c	77	44	0
Bodalla....	b	83	36	0
Cooma	o	76	32	0
Eden.....	b	71	55	0

M ss V'l	b	62	45	0
Euston	b	90	46	0
G'lb'rn	b	76	33	0
Wagga.	b	77	39	0
C. Geo.	b	75	54	0





H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MAY 5 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·9s. *E.*

Average Annual Rainfall for 23 years ..... 50·243.
[illegible] for 2 years from Jan. 1st to April 30 — 20·[illegible]
[illegible] rainfall from Jan. 1st to May 5 — 8·837
Rain gauges corrected to 32° Fa[illegible] and Mean Sea Level

Barometer.

Stations.	W.	W.	X.	Ma.	[illegible]
Casino ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
T'nt'rfield	b	[illegible]	[illegible]	[illegible]	[illegible]
Clarence .	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Moree....	b	[illegible]	[illegible]	[illegible]	[illegible]
Grafton ..	b	[illegible]	[illegible]	[illegible]	0
Gl'n Inn's	b	79	39	[illegible]	[illegible]
Inverell..	b	69	41	0	[illegible]
Bourke ..	b	[illegible]	[illegible]	[illegible]	6
Narrabri	b	[illegible]	[illegible]	[illegible]	0
Armidale	b	[illegible]	[illegible]	[illegible]	0
B'ndem'r.	c	[illegible]	[illegible]	[illegible]	0
Gunned'h	b	74	52	0	0
C'namble	b	[illegible]	—	—	0
Lismore..	u	[illegible]	[illegible]	[illegible]	0
Walcha ..	c	[illegible]	[illegible]	[illegible]	0
Tamw'rth	b	79	44	0	0
Coonab'n	b	81	35	0	0
P.M'cqrie	b	75	53	0	0
W'lcannia	b	—	—	—	0
M'rr'r'ndi	b	71	48	0	0
Tareé.....	b	77	50	0	0
Cassilis ..	b	69	48	0	0
M'ss'lbr'k	b	72	50	0	0
Dubbo. ...	c	83	44	0	0
Menindie.	b	82	60	0	0
Singleton	b	73	51	0	0
N'ls'n sB	c	79	60	0	0
8 56					
Mudg	b	83	36	0	0
Ma tland.	b	70	50	0	0
Hill End.	b	—	—	—	0
N'wcastle	b	72	55	0	0
Orange ..	c	64	40	0	0
Bathurst	c	78	35	0	0
Forbes. ..	c	78	52	0	0
M.V'ct'ria	c	68	53	0	0
Carcoar..	b	62	51	0	0
Cond'b'l'n	c	63	42	0	0
Marsdens	b	71	54	0	0
Picton. ..	b	75	44	0	0
Sydney ..	c	71	54	0	0
Wentw'th	b	67	52	0	0
Young. ..	g	88	40	0	0
Wolf'g'ng	c	75	55	0	0
Taralga..	g	72	45	0	0
Hay	c	84	50	0	0

Stations	W.	W.	X.	Ma.	[illegible]
Ocean'bay'l	c	65	40	[illegible]	[illegible]
Deniliquin .	c	81	54	[illegible]	[illegible]
Moruya	g	[illegible]	[illegible]	[illegible]	[illegible]
Kiandra ...	c	[illegible]	[illegible]	[illegible]	[illegible]
Albury	c	[illegible]	51	[illegible]	[illegible]
Bodalla	g	8[illegible]	43	[illegible]	[illegible]
Cooma	c	[illegible]	35	[illegible]	[illegible]
Eden.....	g	[illegible]	[illegible]	[illegible]	[illegible]

Stations	W.	W.	X.	Ma.	[illegible]
Mudg	b	83	36	0	0
Ma tland.	b	70	50	0	0
Hill End.	b	—	—	—	0
N'wcastle	b	72	55	0	0
Orange ..	c	64	40	0	0
Bathurst	c	78	35	0	0
Forbes. ..	c	78	52	0	0
M.V'ct'ria	c	68	53	0	0
Carcoar..	b	62	51	0	0
Cond'b'l'n	c	63	42	0	0
Marsdens	b	71	54	0	0
Picton. ..	b	75	44	0	0
Sydney ..	c	71	54	0	0
Wentw'th	b	67	52	0	0
Young. ..	g	88	40	0	0
Wolf'g'ng	c	75	55	0	0
Taralga..	g	72	45	0	0
Hay	c	84	50	0	0
M ss V'll	[illegible]	65	50	0	0
Euston	b	3[illegible]	[illegible]	0	0
G'f'f'rn	c	[illegible]	[illegible]	0	0
Wagga.	u	78	30	0	0
C. Geo.	c	71	56	0	0

H.C. RUSSELL.
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY, 6 1885

9 A.M.

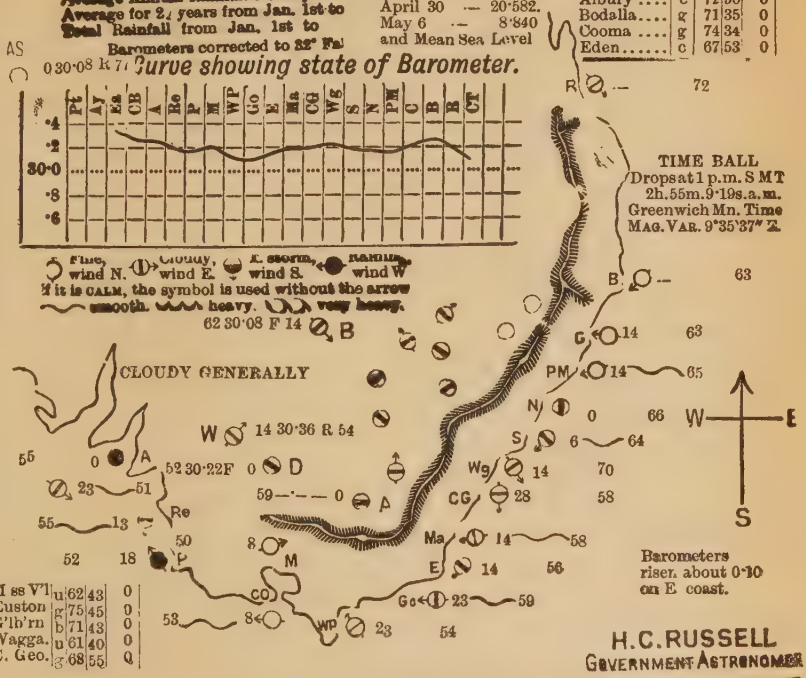
Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 19·9s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 — 20·582.
Total Rainfall from Jan. 1st to May 6 — 8·840
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	m'x	mn	R'in
Casino ...	b	87	47	0
T'nt'rfield	c	75	41	0
Clarence.	c	82	54	0
Moree....	g	86	48	0
Grafton..	c	92	61	0
Gl'n Inn's	c	74	40	0
Inverell..	b	70	44	0
Bourke ..	c	92	60	0
Narrabri	c	70	47	0
Armidalc	b	64	54	0
B'ndem'r.	c	72	37	0
Gunned'h	c	76	53	0
C'namble	u	—	—	—
Lismore..	c	82	58	0
Walcha ..	c	68	36	0
Tamw'rth	c	79	46	0
Coonab'n	g	79	40	0
P.M'cqrie	c	78	56	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	70	49	0
Taree....	c	78	50	0
Cassilis ..	b	70	50	0
M'ss'lbr'k	c	73	52	0
Dubbo. ..	b	78	44	0
Menindie.	u	83	55	0
Singleton	b	76	54	0
N'ls'n sB	c	77	54	0
28 59 Mudg	b	78	32	0
Ma tland.	—	—	—	—
Hill End.	b	—	—	0
N'wcastle	c	82	63	0
Orange ..	c	65	41	0
Bathurst	b	71	33	0
Forbes...	u	72	37	0
M.V'ct'ria	f	65	47	0
Carcoar..	g	62	45	0
Cond'b'l'n	u	55	39	0
Marsdens	—	—	—	—
Picton...	g	70	52	0
Sydney ..	c	77	60	0
Wentw'th	g	69	52	0
Young...	g	80	39	0
Woll'g'ng	g	78	59	0
Taralga..	g	71	42	0
Hay	u	71	41	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	68	43	0
Deniliquin.	g	70	46	0
Moruya....	g	70	56	0
Kiandra...	c	58	22	0
Albury	c	72	50	0
Bodalla....	g	71	35	0
Cooma	g	74	34	0
Eden.....	c	67	53	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 7 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·9s. *E.*

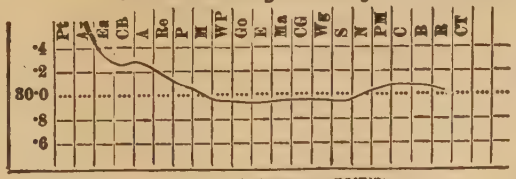
Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 7 ..... ·840
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	85	61	0·04
T'nt'rfield	u	75	54	0·03
Clarence.	o	82	54	0
Moree....	u	80	59	0
Grafton..	u	87	61	0·05
Gl'n Inn's	u	75	47	0·01
Inverell..	o	71	45	0
Bourke ..	r	84	57	0
Narrabri	u	84	58	0
Armidalc	b	63	54	0
B'ndem'r.	u	76	47	0·03
Gunned'h	o	75	57	0
C'namble	–	–	–	–
Lismore..	–	–	–	–
Walcha ..	c	69	43	0
Tamw'rth	–	–	–	–
Coonab'n	b	80	51	0·02
P.M'cqrie	c	77	62	0·44
W'lcannia	r	–	–	0
M'rr'r'ndi	c	68	46	0
Taree....	g	76	62	0·13
Cassilis ..	c	65	54	0
M'ss'lbr'k	b	70	55	0
Dubbo. ...	r	69	53	0·18
Menindie.	o	83	52	0·15
Singleton	u	69	60	0
N'ls'n sB	b	79	62	0
13 60				
Mudg	o	69	43	0
Ma tland.	c	71	60	0
Hill End.	r	–	–	0·15
N'wcastle	b	74	62	0
Orange ..	–	–	–	–
Bathurst	r	63	40	0·07
Forbes. ..	o	68	46	0·23
M.V'ct'ria	c	64	51	0·03
Carcoar..	u	58	51	0
Cond'b'l'n	–	–	–	–
Marsdens	–	–	–	–
Picton. ..	o	67	56	0·11
Sydney ..	o	66	59	0·03
Wentw'th	b	68	41	0
Young. ..	r	70	45	0·28
Woll'g'ng	o	66	56	0·05
Taralga..	r	62	42	0
Hay	b	61	44	0·08

Stations.	wt	M'x	Mn	R'in
Queanbey'n	r	54	46	0·34
Deniliquin.	b	60	41	0
Moruya....	–	–	–	–
Kiandra...	o	46	29	0·30
Albury	c	63	44	0
Bodalla....	–	–	–	–
Cooma	r	56	45	0·12
Eden.....	r	64	54	0·05

M ss V'l	u	61	51	0·03
Euston	b	75	40	0
G'lb'rn	o	63	44	0
Wagga.	u	61	47	0·08
C. Geo.	r	62	56	0·09

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. L. storm, wind S. rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

55 30·01 F 28 B

CLOUDY GENERALLY

W 28 30·31 F 45

4730·19F D

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·2 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 8 1885

9 A.M.

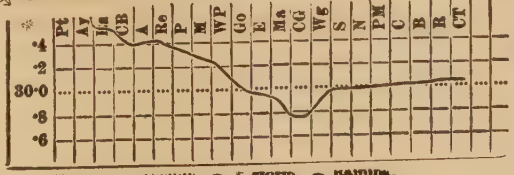
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 10·8s. *E.*

Average Annual Rainfall for 26 years	.....50·243.
Average for 2[illegible] years from Jan. 1st to	20·582.
Total Rainfall from Jan. 1st to May 8	·840
	and Mean Sea Level

Barometers corrected to 32° Fa[illegible]

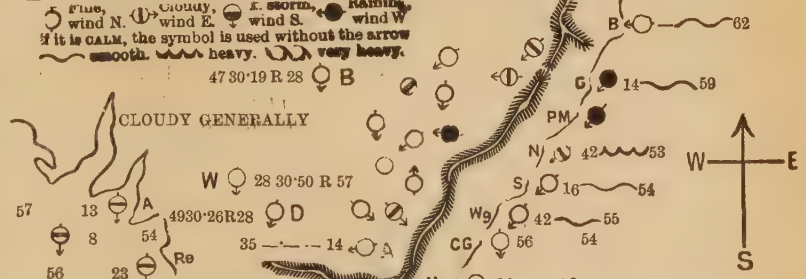
Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. T. storm, wind S. Rainy, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



Barometers riser. about 0·10 on S. coast.

Stations.	wt	M'x	Mn	R'in
Casino ...	b	72	58	0·19
T'nt'rfield	u	70	46	0·29
Clarence .	r	82	54	0·10
Moree....	b	87	58	0·11
Grafton ..	r	81	58	0·14
Gl'n Inn's	u	66	41	0·67
Inverell..	c	71	44	0·32
Bourke ..	b	55	44	0·12
Narrabri	b	74	47	0·56
Armidale	u	64	54	0·50
B'ndem'r.	r	69	45	0·55
Gunned'h	b	76	48	0·92
C'namble	–	--	–	--
Lismore..	c	--	61	0
Walcha ..	u	69	42	0·32
Tamw'rth	c	74	46	0 87
Coonab'n	b	74	40	0·91
P.M'cqrie	r	77	55	0·61
W'lcannia	b	–		0·38
M'rr'r'ndi	r	70	45	0·90
Taree....	r	79	54	1·40
Cassilis ..	o	64	50	0·39
M'ss'lbr'k	r	73	51	0·97
Dubbo. ..	b	57	39	0·35
Menindie.	b	62	50	0
Singleton	r	74	54	0·88
N'ls'n s B	–	—	—	—
— 59				
Mudg	b	58	39	0·35
Ma tland.	r	74	53	1·26
Hill End.	b	—	—	0·17
N'wcastle	c	77	72	0·70
Orange ..	b	50	37	0·06
Bathurst	b	52	36	0·19
Forbes...	b	69	45	0
M.V'ct'ria	b	50	32	0
Carcoar..	b	52	44	0·23
Cond'b'l'n	b	46	28	0
Marsdens	b	78	46	0
Picton...	b	61	43	0·16
Sydney ..	b	67	53	0·06
Wentw'th	b	60	44	0
Young. ..	b	56	33	0
Woll'g'ng	b	61	51	0·02
Taralga..	–	--	—	—
Hay	c	62	44	0

M ss V'l	b	54	40	0·20
Euston	b	66	42	0
G'lb'rn	b	54	31	0·09
Wagga.	b	60	35	0
C. Geo.	b	64	50	0·25

Stations.	wt	M'x	Mn	R'in
Queanbey'n	b	53	40	0·15
Deniliquin .	b	59	41	0
Moruya....	b	60	44	0·15
Kiandra...	b	41	20	0
Albury	b	59	32	0
Bodalla....	b	61	36	0·10
Cooma	c	56	34	0·02
Eden.....	b	59	57	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 9 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; Long. 10h. 4m. 19·6s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 9 ..... ·840
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

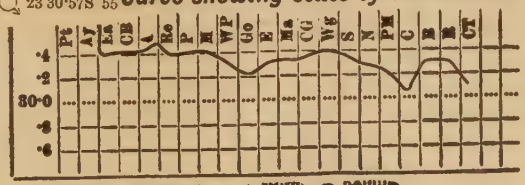
Stations.	wt	M'x	mo	R'in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	b	82	45	0
Moree....	b	62	58	0
Grafton..	b	76	52	0
Gl'n Inn's	b	46	33	0
Inverell..	b	64	37	0
Bourke ..	b	64	44	0
Narrabri	b	72	44	0
Armidalc	b	53	41	0·04
B'ndem'r.	b	62	36	0·04
Gunned'h	b	62	41	0
C'namble	b	--	—	0
Lismore..	–	--	--	--
Walcha..	b	48	28	0·03
Tamw'rth	b	66	35	0·07
Coonab'n	b	59	35	0
P.M'cqrie	u	58	50	1·30
W'lcannia	b	—	–	0
M'rr'r'ndi	b	59	43	0
Taree....	b	63	50	0·24
Cassilis ..	b	57	39	0
M'ss'lbr'k	b	65	44	0·06
Dubbo. ..	b	59	32	0
Menindie.	b	62	45	0
Singleton	b	60	50	0
N'ls'n aR	b	80	50	0·05
Mudg	b	72	28	0
Ma tland.	b	98	45	0
Hill End.	b	—	—	0
N'wcastle	b	54	53	0
Orange ..	b	48	30	0
Bathurst	b	54	24	0
Forbes...	b	69	48	0
M. V'ct'ria	b	52	37	0
Carcoar..	b	—	—	—
Cond'b'l'n	b	46	29	0
Marsdens	b	78	32	0
Picton...	b	62	34	0
Sydney ..	b	62	49	0
Wentw'th	g	66	44	0
Young. ..	b	78	32	0
Woll'g'ng	b	66	50	0
Taralga..	b	63	26	0
Hay	b	65	39	0

Stations.	wt	M'x	mo	R'in
Qeaunbey'n	b	55	33	0
Deniliquin.	b	65	35	0
Moruya....	b	66	47	0
Kiandra...	b	42	22	0
Albury	b	66	35	0
Bodalla....	b	61	40	0
Cooma	o	55	36	0
Eden.....	b	61	51	0

M ss V'l	b	52	39	0
Euston	b	68	29	0
G'lb'rn	b	59	28	0
Wagga.	b	61	32	0
C. Geo.	b	65	51	0

AS 23 30·57S 55

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.

50 30·42 R 14 B

FINE GENERALLY

W — 30·56 R 52

4330·47R14 D

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers rise, about 0·30 on E. coast.

W E S

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 11 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; *Long.* 10h. 4m. 19·8s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 11 ..... ·840
and Mean Sea Level

Barometers corrected to 32° Fa

Stations.	wt	M'x	MO	R'in
Casino ...	b	70	43	0
T'nt'rfield	b	65	33	0
Clarence .	b	74	48	0
Moree....	b	82	40	0
Grafton ..	b	74	48	0
Gl'n Inn's	b	67	34	0
Inverell ..	b	62	37	0
Bourke ..	b	76	47	0
Narrabri	b	68	40	0
Armidale	b	78	47	0
B'ndem'r.	b	67	33	0
Gunned'h	–	–	–	–
C'namble	b	–	–	0
Lismore ..	b	76	53	0
Walcha ..	b	60	32	0
Tamw'rth	b	68	36	0
Coonab'n	b	69	30	0
P.M'cqrie	b	68	50	0
W'lcannia	b	–	–	0
M'rr'r'ndi	b	61	44	0
Taree....	b	71	49	0
Cassilis ..	b	54	36	0
M'ss'lbr'k	b	63	43	0
Dubbo. ..	b	65	32	0
Menindie.	b	61	43	0
Singleton	b	52	44	0
N'ls'n aB	b	80	49	0
58 61 Mudg	b	72	25	0
Ma tland.	b	68	42	0
Hill End .	b	–	–	0
N'wcastle	b	66	50	0
Orange ..	b	61	29	0
Bathurst	b	63	23	0
Forbes. ..	b	60	30	0
M. V'ct'ria	b	53	38	0
Carcoar ..	b	52	23	0
Cond'b'l'n	b	45	26	0
Marsdens	b	77	41	0
Picton. ..	b	63	31	0
Sydney ..	b	65	48	0
Wentw'th	b	70	40	0
Young. ..	b	71	30	0
Woll'g'ng	b	69	53	0
Taralga ..	b	41	22	0
Hay	b	61	35	0

Stations.	wt	M'x	MO	R'in
Qeaunbey'n	b	54	31	0
Deniliquin .	b	69	32	0
Moruya....	b	65	43	0
Kiandra...	b	50	17	0
Albury	b	65	35	0
Bodalla....	b	72	45	0
Cooma	b	95	19	0
Eden.....	b	63	50	0

AS — 30·41S 55

Curve showing state of Barometer.

Fine, wind N; Cloudy, wind E; Rain, wind S; Misty, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

53 30·32 F 28 B

FINE GENERALLY

W 14 30·50 F 49

59 13 A 41 30·47S D

18 57 43 A

53 13 Re 53

54 28 P 8 M

52 8 CO 8 WP 23 53

Ma 48

E 14 50

Go 23 54

CG 14 53

Wg 14 51

S 11 51

N 14 58

PM 14 57

G 28 57

B 64

R 55

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W — E
S

Barometers riser. about 0·10 on E. coast.

M ss V'l	b	52	33	0
Euston	b	76	33	0
G'lb'rn	b	55	25	0
Wagga.	b	63	30	0
C. Geo.	b	64	44	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 12 1885

8 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30.....20·582.
Total Rainfall from Jan. 1st to May 12 ..... 8 929
Barometers corrected to 32° Fa and Mean Sea Level

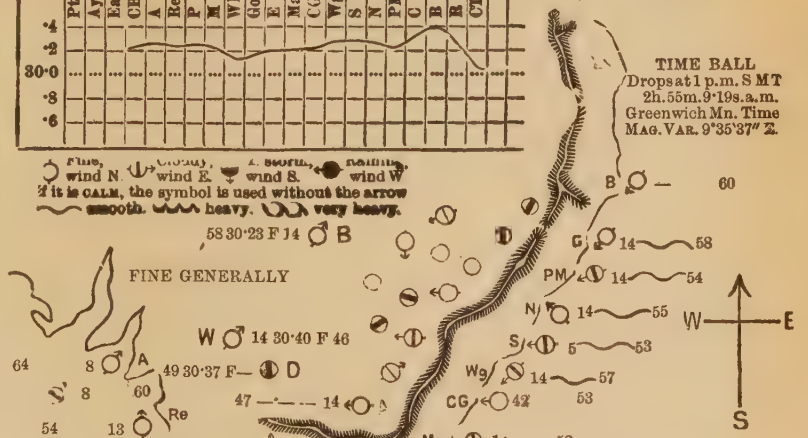
Stations.	w't	m'x	mn	R'in
Casino ...	c	81	49	0
T'nt'rfield	u	68	39	0
Clarence.	b	78	48	0
Moree....	b	84	43	0
Grafton..	u	86	50	0
Gl'n Inn's	b	67	35	0
Inverell..	b	64	39	0
Bourke ..	m	58	51	0
Narrabri	u	70	46	0
Armidalc	c	56	46	0
B'ndem'r.	b	67	34	0
Gunned'h	b	66	46	0
C'namble	b	--	—	0
Lismore..	g	--	—	0
Walcha..	b	61	33	0
Tamw'rth	b	70	39	0
Coonab'n	b	71	36	0
P.M'cqrie	c	70	49	0
W'lcannia	b	—	-	0
M'rr'r'ndi	b	63	42	0
Taree....	c	70	50	0
Cassilis ..	b	61	41	0
M'ss'lbr'k	b	64	43	0
Dubbo. ...	m	65	40	0
Menindie.	-	--	—	—
Singleton	b	64	46	0
N'ls'n sB	b	79	52	0
Mudg	b	72	32	0
Ma tland.	b	67	45	0
Hill End.	b	—	—	0
N'wcastle	b	68	50	0
Orange ..	o	52	32	0
Bathurst	b	65	32	0
Forbes...	b	63	33	0
M.V'ct'ria	b	56	43	0
Carcoar..	-	--	—	—
Cond'b'l'n	b	53	32	0
Marsdens	g	77	41	0
Picton. ..	c	61	41	0
Sydney ..	c	64	49	0
Wentw'th	b	70	44	0
Young. ...	u	79	36	0
Woll'g'ng	b	71	49	0
Taralga..	u	61	25	0
Hay	b	61	35	0

Stations.	w't	m'x	mn	R'in
Queanbey'n	c	53	35	0
Deniliquin.	o	69	42	0
Moruya....	o	67	48	0
Kiandra...	c	48	27	0
Albury	c	65	41	0
Bodalla....	g	72	45	0
Cooma	c	62	36	0
Eden.....	b	65	53	0

M ss V'l	b	53	39	0
Euston	b	76	38	0
G'lb'rn	c	62	30	0
Wagga.	u	62	35	0
C. Geo.	b	65	47	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 13 1885

9 A.M.

Sydney Observatory.

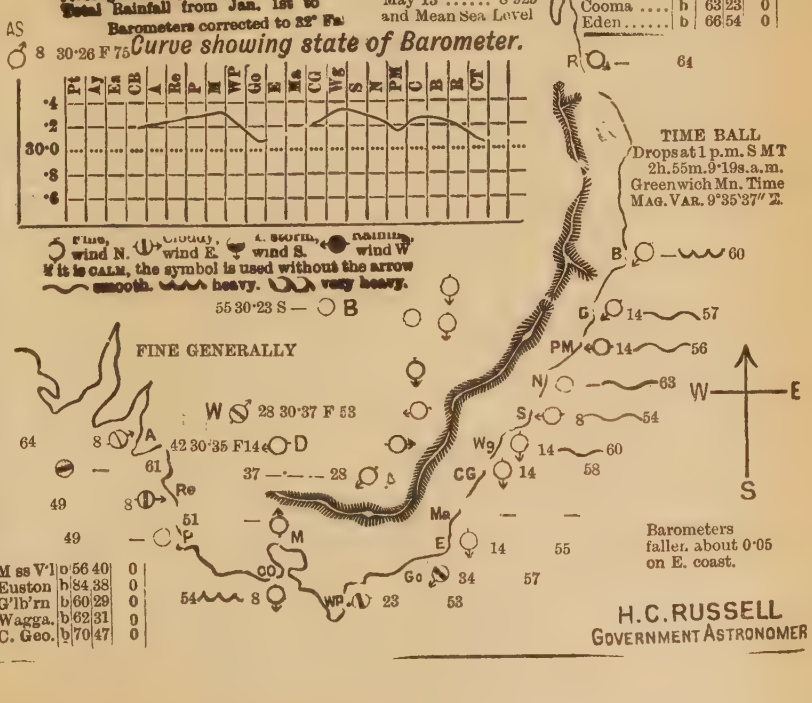
Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2, years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 13 ..... 8·929
and Mean Sea Level

Barometers corrected to 32° Fa

Stations.	wt	M'x	Mn	R'in
Casino ...	b	80	42	0
T'nt'rfield	b	66	34	0
Clarence .	b	74	48	0
Moree....	b	89	52	0
Grafton ..	b	85	47	0
Gl'n Inn's	b	64	34	0
Inverell ..	b	65	37	0
Bourke ..	b	75	45	0
Narrabri	b	69	42	0
Armidalc	b	—	47	0
B'ndem'r.	b	59	31	0
Gunned'h	b	70	43	0
C'namble	b	—	—	0
Lismore..	b	79	47	0
Walcha ..	b	61	30	0
Tamw'rth	b	71	36	0
Coonab'n	o	73	30	0
P.M'cqrie	b	71	48	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	65	39	0
Taree....	b	71	48	0
Cassilis ..	o	63	39	0
M'ss'lbr'k	b	64	43	0
Dubbo. ..	o	75	32	0
Menindie.	b	75	51	0
Singleton	b	62	46	0
N'ls'n aB	b	80	47	0
Mudg	b	77	26	0
Ma tland.	b	70	41	0
Hill End .	b	—	—	0
N'wcastle	b	72	50	0
Orange ..	b	56	31	0
Bathurst	b	61	24	0
Forbes. ..	b	61	31	0
M. V'ct'ria	b	60	46	0
Carcoar..	b	53	34	0
Cond'b'l'n	b	48	31	0
Marsdens	b	78	44	0
Picton. ..	b	65	34	0
Sydney ..	b	66	50	0
Weatw'th	c	79	45	0
Young. ..	b	75	32	0
Woll'g'ng	b	—	47	0
Taralga..	b	66	25	0
Hay	b	72	40	0

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	56	33	0
Deniliquin.	b	69	33	0
Moruya....	—	—	—	—
Kiandra...	b	52	23	0
Albury	b	63	33	0
Bodalla....	—	—	—	—
Cooma	b	63	23	0
Eden	b	66	54	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MAY 14 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; Long. 10h. 4m. 59·6s. E.

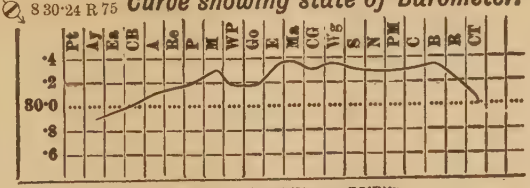
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30.....20·582.
Total Rainfall from Jan. 1st to May 14 ..... 8·931
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	80	46	0
T'nt'rfield	b	72	37	0
Clarence.	b	77	46	0
Moree....	b	83	45	0
Grafton..	b	86	45	0
Gl'n Inn's	b	72	37	0
Inverell..	b	63	38	0
Bourke ..	b	70	25	0
Narrabri	b	68	41	0
Armidalc	b	58	46	0
B'ndem'r.	b	63	31	0
Gunned'h	b	66	46	0
C'namble	b	—	—	0
Lismore..	b	60	58	0
Walcha..	b	63	28	0
Tamw'rth	b	70	39	0
Coonab'n	o	73	29	0
P.M'cqrie	b	70	51	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	62	38	0
Taree....	b	70	50	0
Cassilis ..	o	60	36	0
M'ss'lbr'k	b	67	43	0
Dubbo. ..	o	72	36	0
Menindie.	c	76	55	0
Singleton	b	65	45	0
N'ls'n sB	b	79	51	0
18 65 Mudg	b	81	30	0
Ma tland.	b	65	45	0
Hill End.	b	—	—	0
N'wcastle	b	69	49	0
Orange ..	b	58	32	0
Bathurst	b	75	46	0
Forbes...	b	62	31	0
M.V'ct'ria	b	61	45	0
Carcoar..	b	54	36	0
Cond'b'l'n	b	48	29	0
Marsdens	b	77	45	0
Picton. ..	b	64	33	0
Sydney ..	b	65	49	0
Wentw'th	c	85	52	0
Young. ..	b	83	33	0
Woll'g'ng	b	70	45	0
Taralga..	b	73	29	0
Hay	c	71	41	0

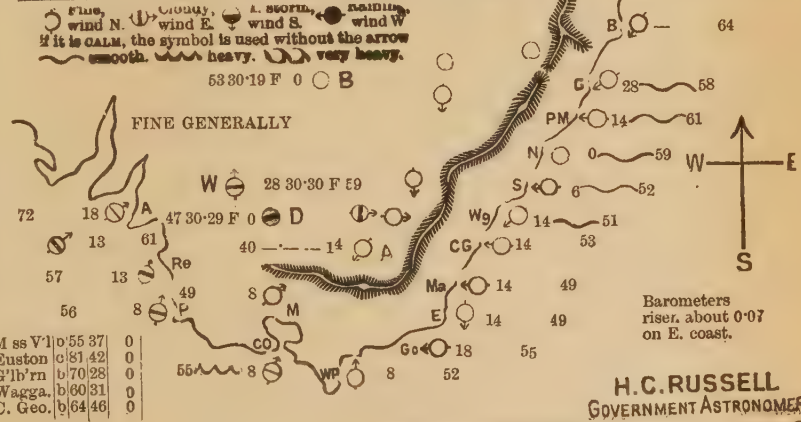
Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	b	55	33	0
Deniliquin.	o	71	35	0
Moruya....	b	69	42	0
Kiandra...	b	51	20	0
Albury	b	71	40	0
Bodalla....	b	73	38	0
Cooma	b	66	21	0
Eden.....	b	65	49	0

M ss V'l	o	55	37	0
Euston	c	81	42	0
G'lb'rn	b	70	28	0
Wagga.	b	60	31	0
C. Geo.	b	64	46	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 15 1885

9 A.M.

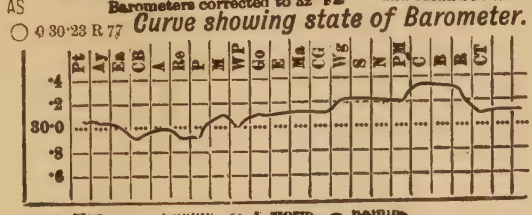
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·9s. *E.*

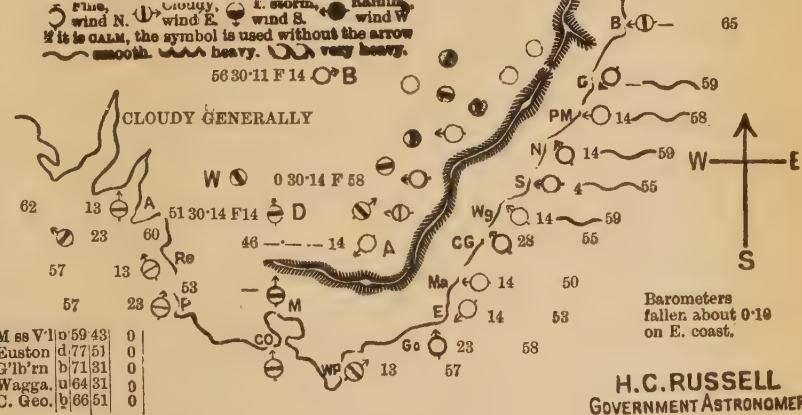
Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 15 ..... 8·933
Barometers corrected to 32° Fa[illegible] and Mean Sea Level

Stations.	wt	m'x	MN	R'in
Casino ...	c	81	47	0
T'nt'rfield	b	71	44	0
Clarence.	b	79	45	0
Moree....	b	80	53	0
Grafton..	b	86	51	0
Gl'n Inn's	f	72	41	0
Inverell..	o	65	39	0
Bourke ..	m	74	53	0
Narrabri	u	70	45	0
Armidale	b	58	47	0
B'ndem'r.	f	64	25	0
Gunned'h	c	67	49	0
C'namble	c	—	—	0
Lismore..	b	—	—	0
Walcha ..	c	64	32	0
Tamw'rth	b	73	42	0
Coonab'n	o	74	39	0
P.M'cqrie	b	72	51	0
W'lcannia	u	—	—	0
M'rr'r'ndi	b	65	43	0
Taree....	b	71	50	0
Cassilis ..	c	60	38	0
M'ss'lbr'k	b	65	43	0
Dubbo. ..	m	75	44	0
Menindie.	c	73	56	0
Singleton	b	65	48	0
N'ls'n sB	b	81	53	0
Mudg	c	79	36	0
Ma tland.	b	65	48	0
Hill End.	c	—	—	0
N'wcastle	b	68	52	0
Orange ..	c	59	31	0
Bathurst	b	69	24	0
Forbes...	c	69	42	0
M.V'ct'ria	b	63	50	0
Carcoar..	b	58	41	0
Cond'b'l'n	c	51	30	0
Marsdens	c	77	44	0
Picton...	b	63	35	0
Sydney ..	b	68	51	0
Wentw'th	d	79	57	0·01
Young. ..	o	79	39	0
Woll'g'ng	b	74	50	0
Taralga..	u	79	35	0
Hay	u	67	45	0

Stations.	wt	m'x	MN	R'in
Qeaunbey'n	b	54	34	0
Deniliquin.	o	68	42	0
Moruya....	b	67	46	0
Kiandra...	b	54	28	0
Albury	c	63	39	0
Bodalla....	b	73	40	0
Cooma	c	37	30	0
Eden.....	b	62	52	0



Fine, wind N. Cloudy, wind E. Stormy, wind S. Rainy, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MAY 16 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10*h.* 4*m.* 59·9*s.* *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30. .....20·582.
Total Rainfall from Jan. 1st to May 16 ..... 8·978
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R'in
Casino ...	b	79	45	0
T'nt'rfield	b	72	42	0
Clarence.	c	78	53	0
Moree....	b	80	56	0
Grafton..	b	84	53	0
Gl'n Inn's	f	70	39	0
Inverell..	u	61	38	0
Bourke ..	b	89	58	0
Narrabri	b	80	56	0
Armidalc	b	58	47	0
B'ndem'r.	u	62	38	0
Gunned'h	–	—	—	—
C'namble	r	—	—	0
Lismore..	–	—	—	—
Walcha..	o	62	36	0
Tamw'rth	c	60	54	0
Coonab'n	r	75	45	0·07
P.M'cqrie	b	73	54	0
W'lcannia	b	—	—	—
M'rr'r'ndi	r	66	53	0
Taree....	b	74	54	0
Cassilis ..	u	65	46	0·16
M'ss'lbr'k	r	69	42	0·07
Dubbo. ...	c	80	50	0·37
Menindie.	b	74	54	0
Singleton	r	65	51	0·06
N'ls'n sB.	c	78	52	0
Mudg	b	78	40	0·30
Ma tland.	o	67	55	0·09
Hill End.	r	—	—	0·56
N'wcastle	r	68	58	0
Orange ..	b	59	43	0·47
Bathurst	u	63	34	0·30
Forbes...	c	75	47	0·20
M.V'ct'ria	r	62	50	0·20
Carcoar..	b	—	—	—
Cond'b'l'n	c	61	38	0·30
Marsdens	c	80	36	0·40
Picton. ..	b	68	41	0
Sydney ..	o	74	56	0·05
Wentw'th	b	81	52	0·34
Young. ..	r	76	41	0·40
Woll'g'ng	o	75	57	0
Taralga..	u	69	37	0
Hay	b	71	48	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	c	58	41	0·13
Deniliquin.	f	71	47	0·20
Moruya....	b	74	50	0
Kiandra...	o	54	35	0·42
Albury	b	67	47	0·36
Bodalla....	b	70	58	0
Cooma	c	65	45	0·14
Eden.....	b	64	58	0·03

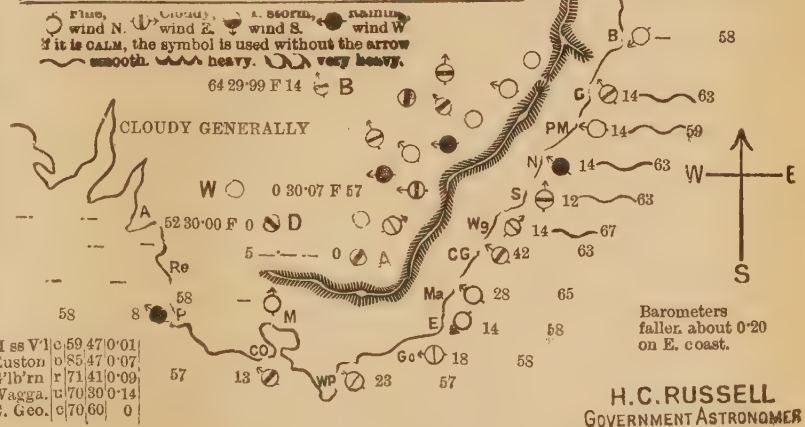
M ss V'l	c	59	47	0·01
Euston	o	85	47	0·07
G'lb'rn	r	71	41	0·09
Wagga.	u	70	30	0·14
C. Geo.	c	70	60	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy. very heavy.



TIME BALL
Drops at 1 p.m. S M T
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·20 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 18 1885

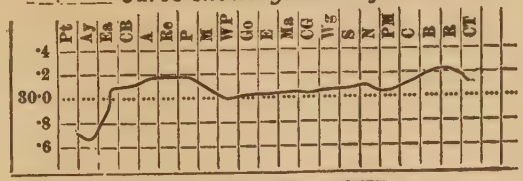
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 50·0s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 18 ..... 9·003
Barometers corrected to 32° Fa. and Mean Sea Level

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

59 30·07 R 0 B

CLOUDY GENERALLY

W 28 30·24 R 54

52 30·11 R14 D

51 14

Stations.	wt	M'x	MN	R'in
Casino ...	b	89	50	0
T'nt'rfield	u	73	36	0
Clarence.	b	81	55	0
Moree....	u	87	53	0
Grafton..	u	93	60	0
Gl'n Inn's	f	71	38	0
Inverell..	o	68	43	0
Bourke ..	u	83	56	0·10
Narrabri	r	78	53	0
Armidalc	o	—	—	0
B'ndem'r.	u	65	34	0
Gunned'h	c	72	52	0·16
C'namble	u	—	—	0·10
Lismore..	—	—	—	—
Walcha ..	o	63	37	0·72
Tamw'rth	r	72	45	0
Coonab'n	r	75	44	0·26
P.M'cqrie	c	75	53	0
W'lcannia	u	—	—	0
M'rr'r'ndi	u	73	56	0
Taree....	c	77	53	0
Cassilis ..	r	66	49	0·18
M'ss'lbr'k	u	69	52	0
Dubbo...	o	75	49	0·08
Menindie.	o	74	58	0
Singleton	u	72	53	0
N'ls'n s P.	c	79	50	0
Mudg	r	75	41	0·10
Ma tland.	o	70	52	0
Hill End.	r	—	—	0 30
N'wcastle	c	77	57	0
Orange ..	o	59	43	0·06
Bathurst	r	61	38	0·11
Forbes...	r	68	47	0·11
M. V'ct'ria	r	61	40	0·18
Carcoar..	r	60	51	0·17
Cond'b'l'n	u	58	38	0·06
Marsdens	c	79	35	0
Picton...	r	70	50	0·02
Sydney...	r	73	56	0·03
Wentw'th	b	71	52	0
Young...	u	78	43	0
Woll'g'ng	o	76	59	0
Taralga..	r	73	40	0·09
Hay	o	73	47	0

Stations.	wt	M'x	MN	R'in
Queanbey'n	o	62	46	0
Deniliquin.	b	69	41	0
Moruya....	u	74	51	0
Kiandra...	o	50	36	0·39
Albury	u	65	48	0
Bodalla....	c	85	59	0
Cooma	o	66	35	0
Eden.....	n	64	52	0

M ss V'l	u	60	49	0
Euston	b	80	50	0
G'lb'rn	o	64	43	0
Wagga.	b	70	48	0·01
C. Geo.	r	73	56	0·07

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

R — 62

B — 66

G 14 60

PM 14 58

N 0 58

S 7 56

Wg 14 59

CG 14 58

Ma 14 53

E 14 57

Go 18 56

WP 23 54

CO 13

M 8

P 8

Re 0

A 8

23 54

58

W E S

Barometers riser. about 0·08 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. MAY 19 1885

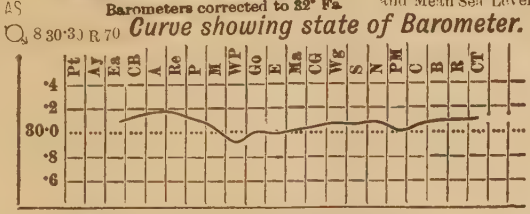
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2[illegible] years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 19 ..... 9·036

Barometers corrected to 32° Fa. and Mean Sea Level

Curve showing state of Barometer.



Fine, wind N — Cloudy, wind E — Storm, wind S — Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth — heavy — very heavy.

Stations.	wt	M'x	Mn	R in
Casino ...	c	80	60	0·07
T'nt'rfield	r	70	51	0·10
Clarence .	c	80	55	0
Moree....	r	65	55	0·28
Grafton ..	r	79	54	0
Gl'n Inn's	r	62	39	0·08
Inverell..	c	65	49	0
Bourke ..	b	71	48	0·30
Narrabri	u	75	49	0·10
Armidale	b	56	50	0·25
B'ndem'r.	u	58	43	0·20
Gunned'h	b	61	54	0·06
C'namble	–	—	—	—
Lismore..	–	—	—	—
Walcha ..	c	56	40	0·10
Tamw'rth	c	63	48	0·07
Coonab'n	b	64	47	0
P.M'cqrie	b	68	53	0
W'lcannia	–	—	—	—
M'rr'r'ndi	c	58	47	0·35
Taree....	b	66	50	0
Cassilis ..	c	59	48	0·11
M'ss'lbr'k	b	64	49	0·15
Dubbo. ..	f	64	45	0·02
Menindie.	b	71	49	0
Singleton	b	61	55	0
N'ls'n sR	b	80	53	0
0 64				
Mudg	c	59	40	0·15
Ma tland.	b	64	50	0·03
Hill End .	f	—	—	0·15
N'wcastle	b	67	52	0
Orange ..	c	55	38	0·18
Bathurst	b	56	36	0·10
Forbes...	b	64	41	0·15
M.V'ct'ria	b	62	38	0·06
Carcoar..	c	55	48	0·13
Cond'b'l'n	b	50	36	0
Marsdens	b	68	39	0
Picton. ..	b	63	45	0·14
Sydney ..	b	62	53	0·03
Wentw'th	b	67	36	0
Young. ..	b	77	43	0·11
Woll'g'ng	b	70	53	0·22
Taralga..	b	61	37	0·07
Hay.....	b	–	–	—

Stations.	wt	M'x	Mn	R'in
Queanbey'n	f	59	46	0
Deniliquin.	b	65	33	0
Moruya....	b	63	50	0·13
Kiandra...	c	48	34	0
Albury	f	57	34	0
Bodalla....	b	80	48	0
Cooma	c	62	37	0
Eden.....	b	62	47	0

M ss V'l	c	—	—	0·15
Euston	b	77	29	0
G'lb'rn	c	62	38	0
Wagga.		0·65	35	0·33
C. Geo.	c	64	51	0·95

Barometers fallen about 0·03 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

DAY 0 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S ; *Long* 10*h.* 4*m.* 50·51*s.* E.

Average Annual Rainfall for 26 years [illegible]

Average for 2[illegible] years from Jan 1st to [illegible]

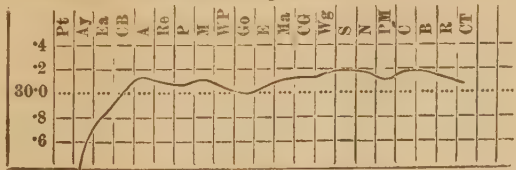
Total rainfall [illegible] Jan. 1st to [illegible]

Ba[illegible] corrected to 32° Fa[illegible]

Stations.	W	W'X	M	P	in.
Casino ...	b	79	46		0
T'nt'rfield	b	63	43	0	0·02
Clarence.	b	79	54		0
Moree....	b	75	43		0
Grafton..	b	83	54	0	0·15
Gl'n Inn's	b	61	39	0	0·01
Inverell..	b	63	36		0
Bourke ..	b	71	43		0
Narrabri	b	67	41		0
Armidale	b	57	44		0
B'ndem'r.	f	65	32		0
Gunned'h	b	62	39		0
C'namble	b	—	—		—
Lismore..	f	77	54		0
Walcha ..	—	—	—		—
Tamw'rth	b	66	33		0
Coonab'n	b	68	27		0
P.M'cqrie	b	70	48		0
W'lcannia	b	—	—		0
M'rr'r'ndi	b	61	36		0
Taree....	b	68	47		0
Cassilis ..	b	58	52		0
M'ss'lbr'k	b	65	45		0
Dubbo. ..	b	65	27		0
Menindie.	b	67	44		0
Singleton	b	69	48		0
N'ls'n sP.	b	78	47		0
8 75					
Mudg'	b	73	25		0
Ma tland.	o	60	41		0
Hill End.	)	—	—		0
N'wcastle	b	78	45		0
Orange ..	b	52	33		0
Bathurst	b	58	22		0
Forbes. ..	b	55	30		0
M.V'ct'ria	o	52	31		0
Carcoar..	b	53	35		0
Cond'b'l'n	b	59	26		0
Marsdens	b	79	35		0
Picton. ..	b	63	31		0
Sydney ..	b	65	46		0
Wentw'th	b	67	41		0
Young. ..	b	78	29		0
Woll'g'ng	b	68	47		0
Taralga..	b	61	30		0
Hay	b	70	34		0

Stations.	W	W'X	M	P	in.
Goulbey'n	b	56	30		0
Deniliquin.	o	62	32		0
Moruya....	b	65	40		0
Kiandra...	b	45	26		0
Albury	b	57	33		0
Bodalla. ..	b	75	33		0
Cooma	b	60	19		0
Eden	b	62	53		0

Curve showing state of Barometer.



Fine, [illegible] wind N [illegible] wind S [illegible] rain, wind W

[illegible] it is [illegible] without the arrow

[illegible] very heavy

38 30·19 F 14 B

FINE GENERALLY

W 14 30·30 R 50

42 30·30 R14 D

35 — — — 0

TIME BALL.
Drops at 1 p.m. S M T
2 p.m. 5 p.m. 9 p.m. 12 a.m.
Greenwich Mn. Time
MAG. VAR. 9° 3′ 37″ E

B — 64

G 14 55

PM 14 55

N 14 54

S 12 50

Wg 14 53

CG 28 46

Ma 28 44

E 14 52

Go 28 53

WP 23 53

CO

M

P

Re

A

C 67

63 8 69 55 13 52 8 53 8 50 —

Miss V'l b 54 36 0
Euston b 73 30 0
G'lb'rn b 61 32 0
Wagga. o 59 30 0
C. Geo. b 63 42 0

N E S

Barometers rise about 0·08 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 21 1885

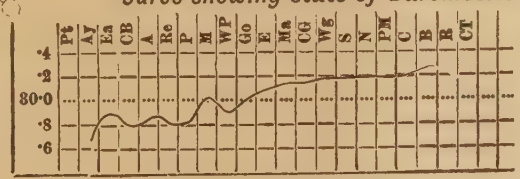
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. [illegible] *E.*

Average Annual Rainfall for 26 years . . . . . 50·243.
Average for 2. years from Jan. 1st to April 30 . . . . . 20·582.
Total Rainfall from Jan. 1st to May 21 . . . . . 9 037
Barometers corrected to 32° Fa [illegible] Mean Sea Level.

Curve showing state of Barometer.



Fine, wind N — Cloudy wind E — Stormy wind S — Rain wind W

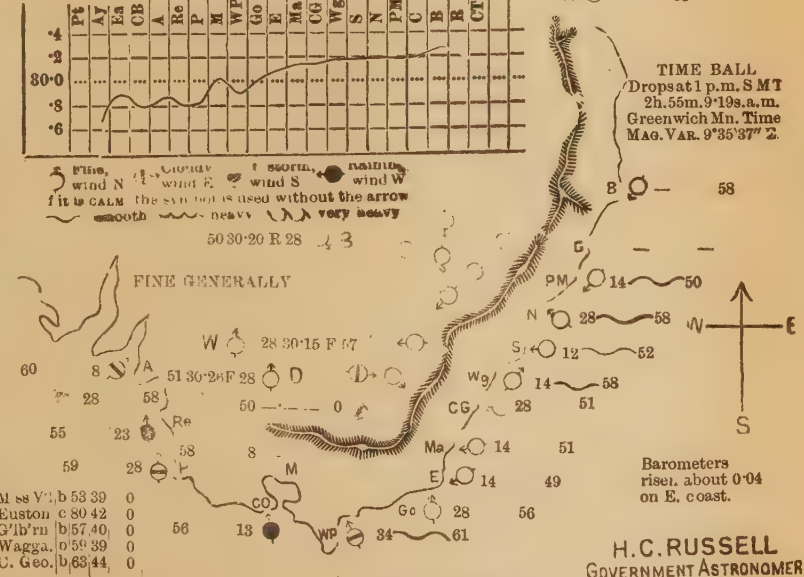
If it is CALM the sun dot is used without the arrow

smooth — heavy — very heavy

50 30·20 R 28

Stations.	wt	M'x	Mn	R in
Casino . . .	b	77	32	0
P'nt'rfield	b	63	28	0
Clarence .	–	—	—	–
Moree. . . .	b	77	35	0
Grafton . .	–	—	—	–
Gl'n Inn's	b	63	38	0
Inverell. .	b	66	31	0
Bourke . .	b	73	42	0
Narrabri	b	60	36	0
Armidalc	b	59	42	0
B'ndem'r.	b	64	25	0
Gunned'h	o	64	37	0
C'namble	b	—	—	0
Lismore. .	b	77	46	0
Walcha . .	b	57	25	0
Tamw'rth	b	64	29	0
Coonab'n	b	67	23	0
P.M'cqrie	b	66	42	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	66	46	0
Taree. . . .	b	66	39	0
Cassilis . .	b	54	36	0
M'ss'lbr'k	b	65	44	0
Dubbo. . .	b	66	29	0
Menindie.	o	70	56	0
Singleton	b	63	45	0
N'ls'n sE	b	79	51	0
23 64 Mudg	b	71	24	0
Ma tland.	o	60	42	0
Hill End.	b	—	—	0
N'wcastle	b	63	47	0
Orange . .	b	50	31	0
Bathurst	b	61	24	0
Forbes. . .	b	67	31	0
M.V'ct'ria	b	54	34	0
Carcoar. .	b	50	36	0
Cond'b'l'n	o	45	27	0
Marsdens	b	76	37	0
Picton. . .	b	61	35	0
Sydney . .	b	61	48	0
Wentw'th	o	78	48	0
Young. . .	b	77	33	0
Woll'g'ng	b	68	45	0
Taralga. .	b	61	28	0
Hay	o	66	44	0

Stations.	wt	M'x	Mn	R in
Qeaunbey'n	b	53	32	0
Deniliquin .	b	65	44	0
Moruya. . . .	b	64	45	0
Kiandra. . .	f	46	26	0
Albury	u	54	34	0
Bodalla. . . .	b	80	36	0
Cooma	b	63	26	0
Eden.	b	62	48	0



M ss V'l	b	53	39	0
Euston	c	80	42	0
G'lb'rn	b	57	40	0
Wagga.	o	59	39	0
C. Geo.	b	63	44	0

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 22 1885

9 A.M.

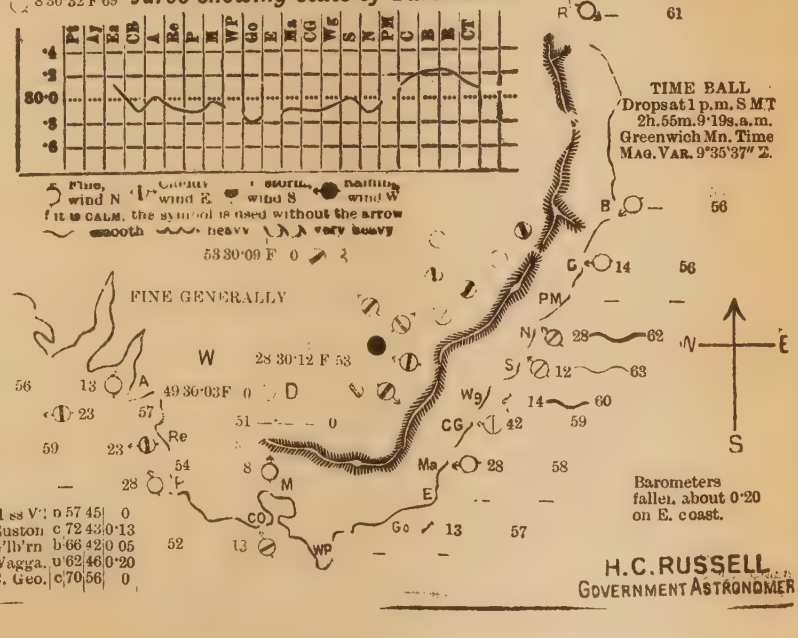
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 49·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 22 ..... 9·037
Barometers corrected to 32° Fa nd Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino...	b	79	38	0
T'nt'rfield	c	68	35	0
Clarence.	b	76	49	0
Moree....	c	77	42	0
Grafton..	c	86	48	0
Gl'n Inn's	b	65	40	0
Inverell..	b	63	30	0
Bourke..	c	71	51	0
Narrabri	f	62	39	0
Armidalc	b	62	42	0
B'ndem'r.	c	65	33	0
Gunned'h	b	62	42	0
C'namble	b	--	--	0
Lismore..	b	78	48	0
Walcha..	c	59	27	0
Tamw'rth	b	66	33	0
Coonab'n	b	69	34	0
P.M'cqrie	-	—	—	--
W'lcannia	u	—	—	0
M'rr'r'ndi	c	60	43	0
Taree....	o	70	40	0
Cassilis..	b	60	39	0
M'ss'lbr'k	c	64	46	0
Dubbo....	c	70	40	0
Menindie.	u	71	53	0
Singleton	u	62	51	0
N'ls'n sB	c	76	51	0
18 60				
Mudg	c	72	30	0
Ma tland.	c	64	42	0
Hill End.	c	—	--	0
N'wcastle	c	71	54	0
Orange..	o	54	35	1·47
Bathurst	u	65	28	0
Forbes...	u	68	31	0
M.V'ct'ria	c	57	40	0
Carcoar..	r	53	41	0·07
Cond'b'l'n	n	55	31	0·03
Marsdens	-	—	—	—
Picton...	c	66	42	0
Sydney..	c	67	53	0
Wentw'th	b	69	50	0 05
Young...	r	76	44	0·23
Woll'g'ng	c	73	55	0
Taralga..	c	66	38	0
Hay.....	c	56	52	0

Stations.	wt	M'x	Mn	R in
Queanbey'n	a	56	35	0
Deniliquin.	b	66	43	0·13
Moruya....	b	74	50	0
Kiandra...	f	45	35	0·62
Albury	b	61	49	0·32
Bodalla....	b	66	45	0
Cooma	c	69	43	0
Eden.....	-	--	—	--



H.C. RUSSELL,
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 23 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 19·9s. E.

Average Annual Rainfall for 26 years ..... 50·243.
Average for 2 years from Jan. 1st to April 30 ..... 20·582.
Total Rainfall from Jan. 1st to May 23 ..... 9·037

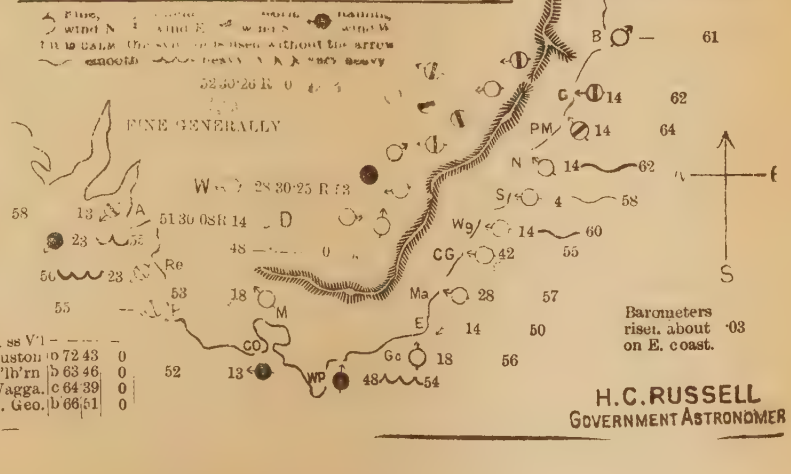
Barometers corrected to 32° Fa

Mean Sea Level

Stations.	Wt	M'x	Mn	R in
Casino ...	c	82	52	0
T'nt'rfield	c	64	38	0
Clarence .	o	77	58	0
Moree....	u	86	50	0
Grafton ..	u	73	56	0
Gl'n Inn's	b	64	43	0
Inverell..	c	66	30	0
Bourke ..	c	62	57	0
Narrabri	c	74	51	0
Armidale	h	62	50	0
B'ndem'r.	r	64	41	0·05
Gunned'h	c	69	44	0
C'namble	b	--	--	0
Lismore..	b	78	55	0
Walcha ..	c	60	37	0·01
Tamw'rth	b	72	40	0·04
Coonab'n	b	74	44	0·06
P.M'cqrie	o	68	50	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	65	53	0
Taree....	c	64	47	0
Cassilis ..	c	64	55	0·17
M'ss'lbr'k	c	68	53	0·06
Dubbo. ..	f	71	47	0·13
Menindie.	c	69	50	0
Singleton	b	70	56	0
N'ls'n sB	o	71	52	0
Mudg	c	74	36	0·20
Ma tland.	m	68	55	0
Hill End.	u	---		0·14
N'wcastle	c	67	59	0·01
Orange ..	b	55	44	0·14
Bathurst	c	62	42	0
Forbes...	f	56	32	0
M.V'ct'ria	b	58	45	0
Carcoar..	c	55	48	0
Cond'b'l'n	f	56	37	0·09
Marsdens	f	78	34	0
Picton. ..	b	64	41	0
Sydney ..	b	70	55	0
Wentw'th	b	71	45	0
Young. ..	r	59	44	0
Woll'g'ng	b	74	52	0
Taralga..	b	55	37	0
Hay	c	71	51	0

Stations.	W't	M'x	Mn	R'in
Queanbey'n	c	55	46	0
Deniliquin.	b	68	44	0
Moruya....	b	76	47	0
Kiandra...	f	62	34	0·30
Albury	u	59	45	0·04
Bodalla....	b	80	40	0
Cooma	b	69	40	0
Eden.....	b	70	49	0

Curve showing state of Barometer.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 25 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 19·9s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 25 ..... 9·038
Barometers corrected to 32° Fa and Mean Sea Level

0 30·46 F 62 *Curve showing state of Barometer.*

Stations.	wt	m'x	mn	R in
Casino ...	b	78	38	0
T'nt'rfield	b	73	33	0
Clarence.	b	77	50	0
Moree....	-	--	-	—
Grafton..	b	84	44	0
Gl'n Inn's	b	67	33	0
Inverell..	b	66	33	0
Bourke ..	b	70	42	0
Narrabri	b	64	39	0
Armidalc	o	63	35	0
B'ndem'r.	b	58	26	0
Gunned'h	b	70	37	0
C'namble	b	—	—	0
Lismore..	-	--	—	—
Walcha..	b	57	27	0
Tamw'rth	b	--	--	0
Coonab'n	b	67	27	0
P.M'cqrie	o	69	48	0
W'lcannia	b	—	-	0
M'rr'r'ndi	b	65	36	0
Taree....	b	66	48	0
Cassilis ..	b	57	38	0
M'ss'lbr'k	b	64	42	0
Dubbo. ..	-	—	-	--
Meniudie.	-	--	-	—
Singleton	b	65	42	0
N'ls'n sB	b	—	—	0
23 60				
Mudg	b	75	27	0
Ma tland.	b	70	40	0
Hill End.	b	—	--	0
N'wcastle	b	62	45	0
Orange ..	b	50	33	0
Bathurst	b	59	22	0
Forbes...	b	61	30	0
M.V'ct'ria	b	54	33	0
Carcoar..	-	—	—	—
Cond'b'l'n	o	47	29	0
Marsdens	b	79	31	0
Picton...	b	62	34	0
Sydney ..	b	65	48	0
Wentw'th	-	—	—	—
Young...	b	79	32	0
Woll'g'ng	b	60	48	0
Taralga..	b	62	21	0
Hay	o	61	44	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	-	—	—	—
Deniliquin.	-	—	—	—
Moruya....	b	67	43	0
Kiandra...	b	46	22	0
Albury	c	61	37	0
Bodalla....	b	75	38	0
Cooma	b	67	23	0
Eden.....	-	—	—	—

M ss V'l	b	53	36	0
Euston	b	—	—	0
G'lb'rn	o	71	26	0
Wagga.	b	63	32	0
C. Geo.	b	65	42	0

Fine, wind N; Cloudy wind E; Rain wind S; Rain wind W
If it is CALM, the symbol is used without the arrow
smooth; heavy; very heavy.

49 30·30 R 14 B

FINE GENERALLY

TIME BALL
Drops at 1 p.m. S M T
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers risen about 0·20 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 26 1905

9 A.M.

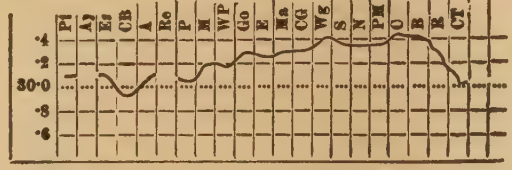
Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 50·0s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30.....20·582.
Total Rainfall from Jan. 1st to May 26 ..... 9·039
and Mean Sea Level

Barometers corrected to 32° Fa.

0 30·45 R 62 *Curve showing state of Barometer.*



Flue, wind N; wind E; wind S; wind W

If it is CALM the symbol is used without the arrow

smooth; heavy; very heavy

47 30·27 F 14 B

CLOUDY GENERALLY

W 28 30·32 –51

50 30·45– 14 D

42 — 0

57 13 A 34 58 Re 54 23 55 18 M 55 40 P CO 53 13 WP 13 54 Ma 14 58 E 14 60 Go 18 58 CG 28 54 Wg 14 56 S 5 52 N 14 58 PM 14 60 G 14 62 B 61 R 67

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

N E S

Barometers riser. about 0·05 on E. coast.

Stations.	wt	M'x	MD	R'in
Casino ...	c	77	58	0·03
T'nt'rfield	f	67	36	0
Clarence.	r	75	62	0·25
Moree....	b	75	45	0
Grafton..	c	85	43	0·34
Gl'n Inn's	u	70	39	0
Inverell..	b	67	36	0
Bourke ..	b	71	38	0
Narrabri	b	67	41	0
Armidalc	f	62	48	0
B'ndem'r.	f	60	35	0
Gunned'h	b	63	43	0
C'namble	–	--	--	–
Lismore..	c	77	61	0·15
Walcha ..	c	60	38	0
Tamw'rth	o	68	40	0
Coonab'n	b	69	28	0
P.M'cqrie	c	68	56	0·79
W'lcannia	b	—	-	0
M'rr'r'ndi	b	60	39	0
Taree....	b	69	54	0
Cassilis ..	b	67	39	0
M'ss'lbr'k	b	64	37	0
Dubbo. ...	b	65	34	0
Menindie.	b	64	41	0
Singleton	b	62	41	0
N'ls'n sB	b	75	66	0
23 60				
Mudg	b	76	32	0
Ma tland.	b	62	45	0
Hill End.	c	—	--	0
N'wcastle	b	66	52	0
Orange ..	b	51	32	0
Bathurst	b	63	23	0
Forbes. ..	b	60	30	0
M. V'ct'ria	u	60	37	0
Carcoar..	b	50	38	0
Cond'b'l'n	o	46	28	0
Marsdens	b	62	43	0
Picton. ..	c	60	32	0
Sydney ..	o	63	49	0
Wentw'th	o	69	41	0
Young. ..	b	79	31	0
Woll'g'ng	b	68	45	0
Taralga..	b	61	21	0
Hay	o	69	43	0

Stations.	wt	M'x	MD	R'in
Qeaunbey'n	b	53	33	0
Deniliquin.	c	72	36	0
Moruya....	b	70	44	0
Kiandra...	b	47	24	0
Albury	f	66	39	0
Bodalla....	b	73	32	0
Cooma	b	60	22	0
Eden.....	b	60	47	0

M ss V'l	b	52	34	0
Euston	o	73	37	0
G'lb'rn	b	64	29	0
Wagga.	b	67	33	0
C. Geo.	b	66	45	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 27 1885

8 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·2s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 27 ..... 9 040

Barometers corrected to 32° Fa

Stations.	wt	M'x	Mn	R'in
Casino ...	f	70	51	0·05
T'nt'rfield	b	65	44	0
Clarence.	f	76	58	0
Moree....	c	80	50	0
Grafton...	f	74	53	0·01
Gl'n Inn's	f	64	42	0
Inverell..	b	65	43	0
Bourke ..	g	71	45	0
Narrabri	o	70	47	0
Armidale	b	61	51	0
B'ndem'r.	f	61	36	0
Gunned'h	c	68	48	0
C'namble	g	—	—	—
Lismore..	c	71	58	0
Walcha..	f	64	35	0
Tamw'rth	b	72	41	0
Coonab'n	u	71	37	0
P.M'cqrie	b	73	55	0
W'leannia	u	—	—	0
M'rr'rndi	g	65	44	0
Taree....	b	74	48	0
Cassilis ..	g	60	41	0
M'ss'lbr'k	b	63	39	0
Dubbo. ..	o	72	37	0
Menindie.	c	69	53	0·04
Singleton	b	65	44	0
N'ls'n sB	b	78	48	0
28 56 Mudg	f	76	33	0
Ma tland.	b	65	45	0
Hill End.	c	—	—	—
N'wcastle	b	72	52	0
Orange ..	g	55	34	0
Bathurst	g	62	27	0
Forbes...	b	59	29	0
M. V'ct'ria	u	60	41	0
Carcoar..	g	55	44	0
Cond'b'l'n	u	51	28	0
Marsdens	u	68	42	0
Picton. ..	f	65	36	0
Sydney ..	c	65	52	0
Wentw'th	u	69	49	0·20
Young. ..	u	74	41	0
Woll'g'ng	g	75	53	0
Taralga..	g	67	24	0
Hay	u	68	42	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	g	57	36	0
Deniliquin.	r	75	40	0·25
Moruya....	o	60	48	0
Kiandra...	o	48	24	0
Albury	d	63	41	0·10
Bodalla....	g	73	36	0
Cooma	o	67	41	0
Eden.....	r	64	53	0

M ss V'l	u	58	46	0
Euston	—	—	—	—
G'lb'rn	g	66	33	0
Wagga.	b	64	41	0
C. Geo.	c	66	51	0

AS 0 30·46 R 0

Curve showing state of Barometer.

P Ay Es CB A Re P M WP Go E Ma CG Wg S N PM C S R CT

·4 ·2 30·0 ·8 ·6

Fine, wind N; Cloudy, wind E; Showery, wind S; Rainy, wind W

If it is CALM, the symbol is used without the arrow

smooth, heavy, very heavy.

51 30·25 F 14 B

CLOUDY GENERALLY

W 28 30·38 R 54

56 8 A 5230·34 F 0 D

13 57 Re 47 0

55 13

53 8 P M CG 52 8 WP 23 53

Ma 14 56

E 14 53

Go 18 57

G 0 58

PM 63

N 14 59

S 5 58

Wg 14 58

CG 28 56

B 63

TIME BALL
Drops at 1 p.m. S MT
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers fallen about 0·06 on E. coast.

H.C.RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 28 1885

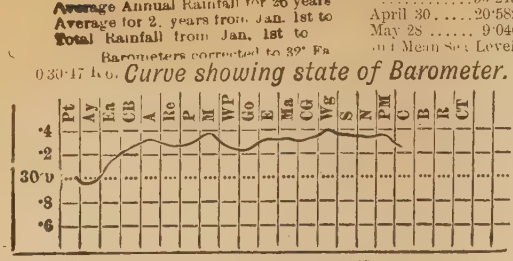
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 59·8s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 28 ..... 9·040
Barometers corrected to 32° Fa. and Mean Sea Level

0 30·47 Ro. *Curve showing state of Barometer.*

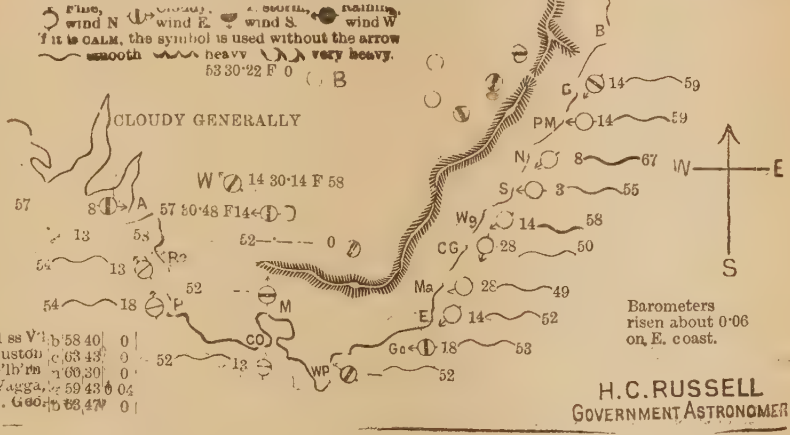


Fine, wind N. Cloudy, wind E. Storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth heavy very heavy.

Stations.	Wt	M'x	Mn	R'in
Casino ...	c	60	43	0
T'nt'rfield	c	68	45	0
Clarence .	g	76	56	0
Moree....	b	79	51	0
Grafton ..	g	81	52	0
Gl'n Inn's	b	69	42	0
Inverell..	b	66	45	0
Bourke ..	b	68	46	0
Narrabri	b	69	46	0
Armidale	b	60	52	0
B'ndem'r.	b	61	32	0
Gunned'h	–	—	—	—
C'namble	–	—	—	–
Lismore..	c	78	52	0
Walcha ..	b	63	34	0
Tamw'rth	b	73	43	0
Coonab'n	b	72	37	0
P.M'cqrie	b	75	55	0
W'lcannia	b	—	—	0
M'rr'r'ndi	u	65	49	0
Taree....	–	—	—	—
Cassilis ..	g	64	49	0
M'ss'lbr'k	o	74	46	0
Dubbo. ..	m	63	39	0
Menindie.	f	70	46	0
Singleton	b	70	48	0
N'ls'n sB.	c	76	57	0
0·60				
Mudg'	f	69	35	0
Ma tlands	g	67	50	0
Bill End.	b	—	—	0
N'wcastle	c	75	58	0
Orange ..	n	56	34	0
Bathurst	b	63	29	0
Forbes...	b	61	31	0
M.V'ct'ria	b	59	42	0
Carcoar...	n	54	40	0
Cond'b'l'n	–	—	—	—
Marsdens	n	59	43	0·08
Picton. ..	b	64	38	0
Sydney ..	b	72	53	0
Wentw'th	g	64	41	0
Young. ...	b	70	36	0
Woll'g'ng	b	71	49	0
Taralga..	b	58	25	0
Hay	n	54	44	0

Stations.	Wt	M'x	Mn	R'in
Queanbey'n	f	55	37	0
Deniliquin .	g	60	48	0
Moruya....	b	62	44	0·06
Kiandra...	f	43	36	0·32
Albury	u	55	47	0·10
Bodalla....	b	80	32	0
Cooma	n	60	27	0
Eden.....	c	59	52	0

M ss V'l	b	58	40	0
Euston	c	63	43	0
G'lb'rn	n	60	30	0
Wagga,	c	59	43	0·04
C. Gec	b	63	47	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 29 [illegible]

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. [illegible] E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to April 30 .....20·582.
Total Rainfall from Jan. 1st to May 29 ..... 9·041

Barometers corrected to 32° Fa[illegible] [illegible] Mean Sea Level

0 30·00 R 0

Curve showing state of Barometer.

Fine, wind N; Cloudy, wind E; [illegible], wind S; rain[illegible], wind W

If it is CALM, the symbol is used without the arrow

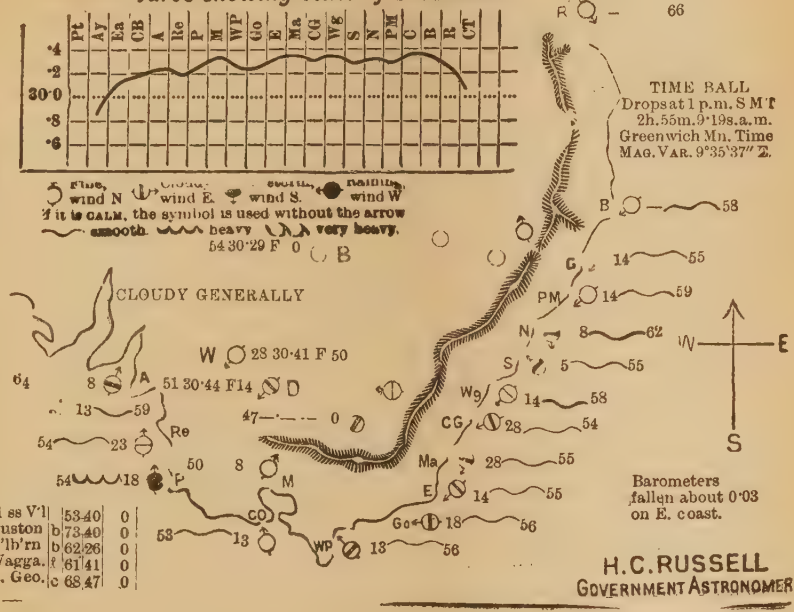
smooth; heavy; very heavy.

54 30·29 F 0 B

Stations.	W't	M'x	Mn	R'in
Casino...	b	79	41	0
T'nt'rfield	b	72	35	0
Clarence.	c	77	55	0
Moree....	b	82	47	0
Grafton..	f	85	48	0
Gl'n Inn's	c	68	36	0
Inverell..	b	67	40	0
Bourke ..	b	82	47	0
Narrabri	b	68	45	0
Armidale	b	60	50	0
B'ndem'r.	b	58	34	0
Gunned'h	c	70	44	0
C'namble	–	–	–	–
Lismore..	c	78	51	0
Walcha ..	–	–	–	–
Tamw'rth	b	74	39	0
Coonab'n	n	76	29	0
P.M'cquie	b	71	54	0
W'lcannia	b	–	–	0
M'rr'r'ndi	f	65	45	0
Taree....	c	75	54	0
Cassilis ..	b	65	41	0
M'ss'lbr'k	g	72	45	0
Dubbo. ..	–	–	–	–
Meniudie.	b	71	47	0
Singleton	u	70	54	0
N'le'n sB	c	79	56	0
34 72				
Mudg	n	78	28	0
Ma tland.	u	65	54	0
Hill End.	n	–	–	0
N'wcastle	c	69	60	0
Orange ..	n	55	32	0
Bathurst	f	67	24	0
Forbes...	b	65	32	0
M. V'ct'ria	u	58	40	0
Carcoar..	b	54	36	0
Cond'b'l'n	b	52	33	0
Marsdens	n	65	43	0
Victon. ..	c	66	40	0
Sydney ..	c	68	52	0
Wentw'th	b	70	44	0
Young. ..	n	77	38	0
Woll'g'ng	g	69	51	0
Taralga..	n	68	28	0
Hay	c	68	41	0

Stations.	W't	M'x	Mn	R'in
Queanbey'n	c	54	39	0
Deniliquin.	g	65	45	0
Moruya....	g	52	49	0
Kiandra...	c	48	32	0
Albury	g	61	45	0·01
Bodalla....	g	72	40	0
Cooma	c	65	34	0
Eden.....	u	62	52	0

M ss V'l		53	40	0
Euston	b	73	40	0
G'lb'rn	b	62	26	0
Wagga.	[illegible]	61	41	0
C. Geo.	c	68	47	0



TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·03 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

MAY 30 1885

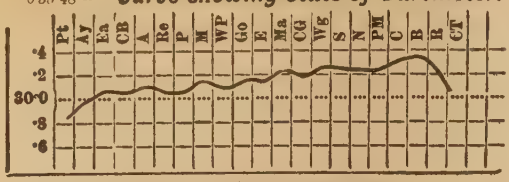
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 59·9s. E.

Average Annual Rainfall for 96 years .....50·243.
Average for 2. years from Jan. 1st to April 30.....20·582.
Total Rainfall from Jan. 1st to May 30 ..... 9·043
Barometers corrected to 32° Fa. and Mean Sea Level

0 30·48 R. *Curve showing state of Barometer.*



Stations.	wt	M'x	Mn	R in
Casino ...	h	80	44	0
Tent'rfield	h	71	35	0
Clarence.	c	78	57	0
Moree....	h	82	37	0
Grafton..	f	84	50	0
Gl'n Inn's	f	68	40	0
Inverell..	b	64	35	0
Bourke ..	b	74	42	0
Narrabri	b	66	41	0
Armidale	h	48	45	0
B'ndem'r.	n	60	31	0
Gunned'h	c	67	41	0
C'namble	—	—	—	—
Lismore..	b	79	51	0
Walcha ..	f	62	34	0
Tamw'rth	c	70	35	0
Coonab'n	n	70	29	0
P.M'cqrie	c	72	53	0
W'lcannia	h	—	—	0
M'rr'r'ndi	c	63	41	0
Taree....	—	—	—	—
Cassilis ..	b	60	41	0
M'ss'lbr'k	c	73	44	0
Dubbo. ..	—	—	—	—
Menindie.	b	73	51	0
Singleton	h	68	52	0
N'le'n sB	b	76	52	0
71 Mudg	n	74	30	0
Ma tland.	c	63	50	0
Hill End.	g	—	—	0
N'wcastle	c	70	52	0
Orange ..	g	64	34	0
Bathurst	u	64	26	0
Forbes...	c	66	32	0
M. V'ct'ria	c	58	39	0
Carcoar..	g	50	37	0
Cond'b'l'n	g	50	31	0
Marsdens	c	65	44	0
Picton. ..	g	64	40	0
Sydney ..	g	65	51	0
Wentw'th	c	75	49	0
Young. ..	g	78	38	0
Wolf'g'ng	g	67	53	0
Taralga..	u	66	20	0
Hay	u	71	49	0

Stations.	wt	M'x	Mn	R in
Queanbey'n	c	53	36	0
Deniliquin.	g	68	45	0
Moruya....	g	59	47	0·26
Kiandra...	d	45	29	0·06
Albury	d	61	43	0·05
Bodalla....	g	53	44	0·13
Cooma	n	63	31	0·06
Eden.....	c	61	51	0

M ss V'l	u	55	42	0
Euston	g	77	44	0
G'lb'rn	g	65	29	0
Wagga.	u	64	41	0
C. Geo.	g	64	46	0

Fine, wind N — Cloudy, wind E — Showers, wind S — Rain, wind W

If it is CALM, the symbol is used without the arrow

smooth — heavy — very heavy.

52 30·28 F 0

CLOUDY GENERALLY

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·05 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 1 1885

Sydney Observatory.

Lat. 33° 51 41" S ; Long. 10h. 4m. 19·9s. E.

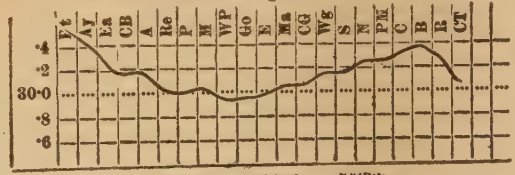
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 1 ..... 9·045
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	b	79	46	0
T'nt'rfield	u	70	36	0
Clarence.	b	79	59	0
Moree....	b	83	48	0
Grafton...	u	85	48	0
Gl'n Inn's	n	72	36	0
Inverell..	b	69	35	0
Bourke ..	–	—	—	—
Narrabri	b	65	41	0
Armidale	b	—	45	0
B'ndem'r.	n	63	34	0
Gunned'h	b	68	47	0
C'namble	–	—	—	—
Lismore..	b	77	55	0·01
Walcha ..	n	65	33	0
Tamw'rth	b	72	41	0
Coonab'n	b	74	35	0
P.M'cqrie	b	71	51	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	65	43	0
Taree....	b	73	47	0
Cassilis ..	b	65	44	0
M'ss'lbr'k	b	73	39	0
Dubbo. ...	m	73	40	0
Menindie.	c	77	55	0
Singleton	b	70	44	0
N'ls'n sB	b	78	53	0
Mudg	n	78	31	0
Ma tland.	b	68	45	0
Hill End.	b	—	—	0
N'wcastle	b	74	52	0
Orange ..	b	61	38	0
Bathurst	b	70	26	0
Forbes...	b	61	34	0
M. V'ct'ria	b	64	44	0
Carcoar..	b	55	38	0
Cond'b'l'n	b	56	36	0
Marsdens	c	71	46	0
Picton...	b	71	40	0
Sydney ..	b	70	63	0
Wentw'th	o	78	52	0
Young. ...	g	85	38	0
Wol'g'ng	b	74	58	0
Taralga..	b	79	32	0
Hay	n	79	51	0

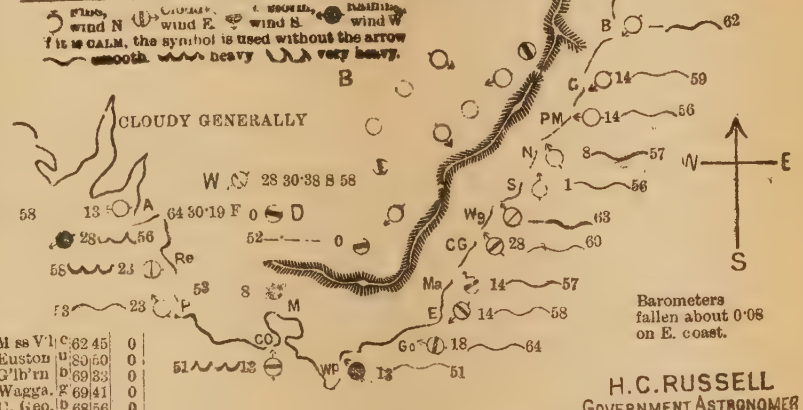
Stations.	wt	M'x	Mn	R in
Queanbey'n	b	59	39	0
Deniliquin.	u	73	48	0
Moruya....	o	68	51	0
Kiandra...	c	51	32	0·31
Albury	u	66	45	0
Bodalla....	b	73	57	0
Cooma	c	54	35	0·03
Eden.....	u	64	55	0

M ss V'l	c	62	45	0
Euston	u	80	50	0
G'lb'rn	b	69	33	0
Wagga.	g	69	41	0
C. Geo.	b	68	56	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Rain, wind S. Snow, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C.RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

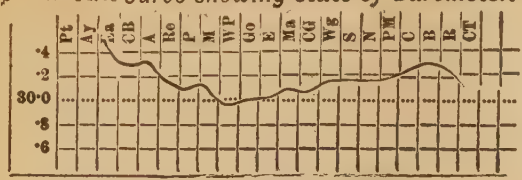
9 A.M. JUNE 2 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S* ; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 2 ..... 9·045
Barometers corrected to 32° Fa ...d Mean Sea Level

13 30·52 R 56 *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth heavy very heavy.

58 30·21— 14 B

CLOUDY GENERALLY

W 28 30·38 S 44

52 13 A 56 30·33R 42

28 52

55 23 Ro

48 — 14

50 13 M

49 28 P

CO

47 18

WP 48 48

Go 28 53

E 14 54

Ma 14 59

CG 42 55

Wg 28 59

S 3 61

N 8 62

PM 14 60

C 14 60

B 65

R 66

TIME BALL
Drops at 1 p.m. S MT
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

N E S

Barometers fallen about 0·05 on E. coast.

Stations.	wt	M'x	MN	R in
Casino ...	c	81	43	0
T'nt'rfield	c	73	49	0
Clarence.	c	79	58	0
Moree....	c	80	50	0
Grafton..	c	83	49	0
Gl'n Inn's	c	75	36	0
Inverell..	b	66	41	0
Bourke ..	c	86	54	0
Narrabri	g	75	41	0
Armidale	b	60	45	0
S'ndem'r.	n	61	46	0
Gunned'h	c	72	48	0
C'namble	b	—	—	0
Lismore..	c	78	54	0
Walcha ..	v	65	34	0
Tamw'rth	b	75	43	0
Coonab'n	c	74	39	0
P.M'cqrie	b	71	54	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	66	49	0
Taree....	g	75	47	0
Cassilis ..	b	65	46	0
M'ss'lbr'k	b	73	44	0
Dubbo. ..	g	77	43	0
Menindie.	b	65	46	0
Singleton	b	70	50	0
N'ls'n sB	g	76	70	0
13 53 Mudg	n	80	31	0
Ma tland.	b	68	50	0
Hill End.	c	—	—	0
N'wcastle	c	73	55	0
Orange ..	b	60	40	0
Bathurst	b	70	34	0
Forbes...	b	70	40	0
M. V'ct'ria	b	64	45	0
Carcoar..	b	57	46	0·02
Cond'b'l'n	b	54	36	0
Marsdens	b	70	53	0
Picton. ..	c	69	43	0
Sydney ..	c	70	56	0
Wentw'th	b	66	39	0
Young. ..	b	80	41	0·02
Woll'g'ng	b	74	58	0
Taralga..	b	76	38	0
Hay	b	66	38	0

Stations.	wt	M'x	MN	R in
M ss V'l	c	63	48	0
Euston	c	66	33	0
G'lb'rn	b	69	38	0
Wagga.	b	61	42	0
C. Geo.	b	69	53	0

Stations.	wt	M'x	MN	R in
Queanbey'n	c	61	41	0
Deniliquin.	b	63	35	0
Moruya....	b	77	46	0
Kiandra...	c	51	34	0·63
Albury	g	66	46	0·08
Bodalla....	—	—	—	—
Cooma	g	67	34	0
Eden.....	b	70	52	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER.

METEOROLOGY.

9 A.M. JUNE 3 1885

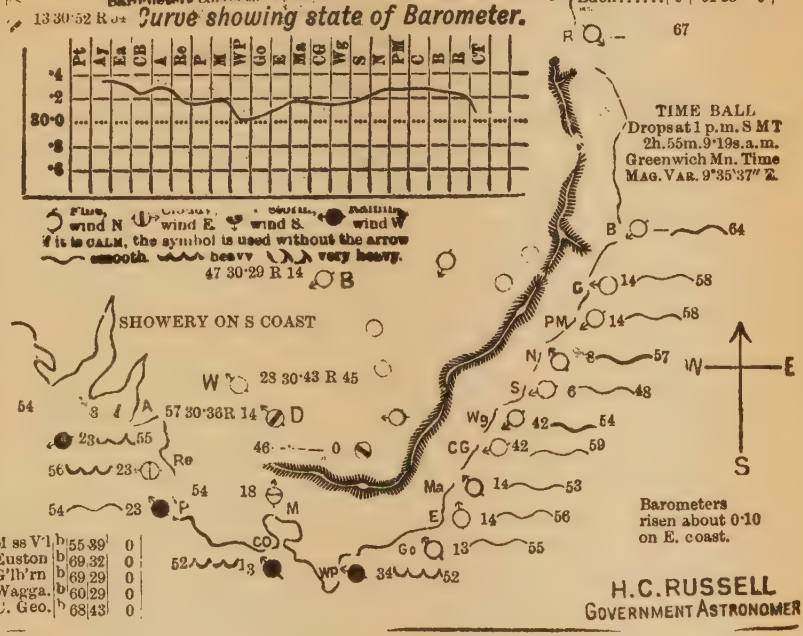
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·0s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 3 ..... 9·046
Barometers corrected to 32° Fa nd Mean Sea Level

Stations.	Wt	M'x	Mn	R in
Casino ...	b	81	45	0
T'nt'rfield	c	69	39	0
Clarence .	c	78	58	0
Moree....	b	82	50	0
Grafton..	b	82	48	0
Gl'n Inn's	b	70	39	0
Inverell..	b	67	43	0
Bourke ..	b	81	39	0
Narrabri	c	68	43	0
Armidalc	–	—	—	—
B'ndem'r.	n	60	35	0
Gunned'h	b	69	43	0
C'namble	b	..	—	0
Lismore..	c	76	55	0
Walcha..	n	62	32	0
Tamw'rth	b	69	38	0
Coonab'n	n	71	25	0
P.M'cqrie	b	74	52	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	65	41	0
Taree....	b	69	49	0
Cassilis ..	n	60	38	0
M'ss'lbr'k	b	73	37	0
Dubbo. ...	b	69	27	0
Menindie.	b	65	42	0
Singleton	b	70	46	0
N'ls'n sP	b	78	49	0
0 55 Mudg	n	76	20	0
Ma tland.	b	67	41	0
Hill End.	n	—	—	0
N'wcastle	b	74	46	0
Orange ..	n	52	26	0
Bathurst	b	61	19	0
Forbes...	n	63	26	0
M.V'ct'ria	b	56	34	0
Carcoar..	n	55	32	0
Cond'b'l'n	n	45	27	0
Marsdens	n	64	38	0
Picton. ..	b	64	33	0
Sydney ..	b	68	45	0
Wentw'th	b	65	42	0
Young. ..	n	82	23	0
Woll'g'ng	b	72	45	0
Taralga..	n	69	29	0
Hay	b	63	37	0

Stations.	Wt	M'x	Mn	R in
Queanbey'n	c	57	32	0
Deniliquin .	c	63	37	0
Moruya....	b	69	43	0
Kiandra...	s	45	30	0
Albury	g	59	33	0
Bodalla....	b	78	32	0
Cooma	n	63	31	0
Eden.....	c	61	55	0



M ss V'l	b	55	39	0
Euston	b	69	32	0
G'lb'rn	b	69	29	0
Wagga.	b	60	29	0
C. Geo.	b	68	43	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 4 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 4 ..... 9·048
Barometers corrected to 32° Fa[illegible] [illegible]nd Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	g	82	52	0
T'nt'rfield	c	73	46	0
Clarence.	u	80	62	0·08
Moree....	u	83	50	0
Grafton..	c	86	50	0
Gl'n Inn's	o	72	42	0
Inverell..	u	66	43	0
Bourke ..	g	76	41	0
Narrabri	u	71	45	0
Armidalc	b	59	46	0
B'ndem'r.	u	66	34	0
Gunned'h	–	—	—	—
C'namble	–	...	—	—
Lismore..	u	81	58	0
Walcha..	b	64	35	0
Tamw'rth	c	72	39	0
Coonab'n	g	66	21	0
P.M'cqrie	c	69	52	0
W'lcannia	b	—	—	0
M'rr'r'ndi	c	62	36	0
Taree....	b	70	47	0
Cassilis ..	c	57	28	0
M'ss'lbr'k	b	64	28	0
Dubbo. ..	b	65	23	0
Menindie.	b	67	41	0
Singleton	b	60	38	0
N'ls'n sB	c	76	45	0
13 53 Mudg	g	71	17	0
Ma tland.	c	63	35	0
Hill End.	n	—	—	0
N'wcastle	b	69	43	0
Orange ..	n	50	27	0
Bathurst	n	59	20	0
Forbes...	n	62	25	0
M.V'ct'ria	–	—	—	—
Carcoar..	n	49	32	0
Cond'b'l'n	n	42	25	0
Marsdens	n	62	38	0
Picton. ..	n	63	31	0
Sydney ..	c	64	55	0
Wentw'th	c	67	44	0
Young. ..	n	79	31	0
Woll'g'ng	b	70	43	0
Taralga..	n	66	25	0
Hay	u	68	22	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	c	53	31	0
Deniliquin.	g	61	44	0
Moruya....	b	66	39	0
Kiandra...	c	41	30	0
Albury	g	54	45	0
Bodalla....	b	72	30	0
Cooma	n	63	21	0
Eden.....	b	65	50	0

R – 67

13 30 49 S 52 *Curve showing state of Barometer.*

Pt Ly Ea CB A Re P M WP Go E Ma CG Wg S N PM C B R CT

30·4 ·2 ·0 ·8 ·6

Fine, wind N. Cloudy, wind E. [illegible] rain, wind S. Rain, wind W.

If it is CALM, the symbol is used without the arrow.

smooth. heavy. very heavy.

46 30·25 F 14 B

SHOWERY ON S COAST

W 28 30·39 F 50

54 13 A 59 30·39 R 14 D

28 53

49 14

19 23 Re

54 18 M

54 28 P

CO

54 13 WP 18 55

Ga 18 54

E 14 50

Ma 28 46

CG 42 50

Wg 14 49

S 7 47

N 8 56

PM 14 60

C 0 61

G

B 61

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers risen about 0·10 on E. coast.

M ss V'l	n	52	37	0
Euston	g	64	43	0
G'lb'rn	n	55	25	0
Wagga.	b	56	31	0
C. Geo.	b	68	46	0

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 5

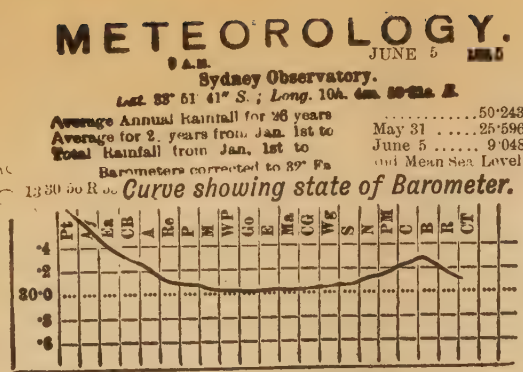
9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 59·7s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 5 ..... 9·048
Barometers corrected to 32° Fa and Mean Sea Level

13 30 50 R 30 *Curve showing state of Barometer.*



Fine, wind N; Cloudy, wind E; Rain, wind S; Rain, wind W

If it is CALM, the symbol is used without the arrow

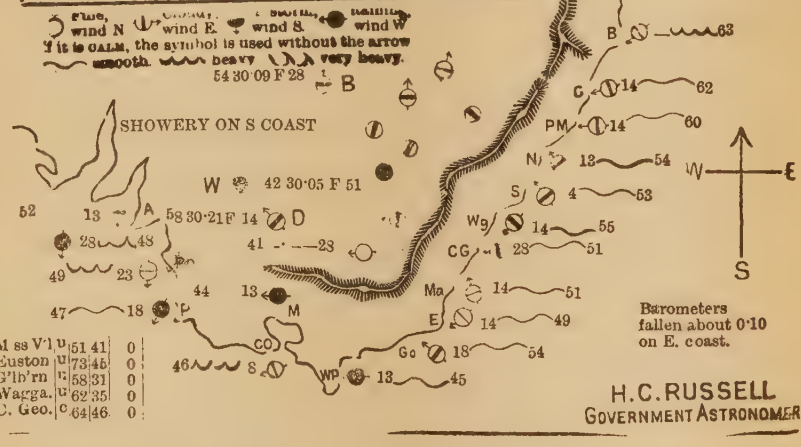
smooth, heavy, very heavy.

54 30·09 F 28

Stations.	wt	m'x	mn	R in
Casino ...	—	—	—	—
F'nt'rfield	—	—	—	—
Clarence..	o	81	62	0
Moree....	g	77	56	0
Grafton...	f	81	51	0
Gl'n Inn's	u	69	50	0·03
Inverell..	o	66	48	0·02
Bourke ...	g	71	46	0
Narrabri	u	76	49	0
Armidalc	g	59	46	0
B'ndem'r.	g	60	40	0
Gunned'h	u	65	42	0·04
C'namble	g	—	—	0
Lismore..	—	—	—	—
Walcha..	u	63	35	0
Tamw'rth	c	67	41	0·10
Coonab'n	u	68	33	0
P.M'cqrie	g	72	55	0
W'lcannia	u	—	—	0
M'rr'r'ndi	r	62	46	0
Taree....	c	70	50	0
Cassilis ..	u	55	31	0
M'ss'lbr'k	g	62	36	0
Dubbo...	o	65	44	0·01
Menindie.	g	66	44	0
Singleton	u	57	42	0
N'ls'n sB	g	74	47	0
28 54 Mudg	u	64	22	0
Ma tland.	u	61	41	0
Hill End.	c	—	—	0·04
N'wcastle	g	66	50	0
Orange ..	g	50	34	0·04
Bathurst	u	56	26	0
Forbes...	u	64	26	0·13
M.V'ct'ria	u	57	39	0
Carcoar..	—	—	—	—
Cond'b'l'n	u	49	26	0·16
Marsdens	p	61	38	0·14
Picton...	g	60	36	0
Sydney ..	g	63	47	0
Wentw'th	d	79	46	0
Young...	r	80	37	0·09
Woll'g'ng	g	69	47	0
Taralga..	u	69	25	0·05
Hay.....	c	67	37	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	g	52	33	0
Deniliquin.	g	62	42	0
Moruya....	g	64	44	0
Kiandra...	n	44	29	0
Albury	b	60	34	0
Bodalla....	g	70	32	0
Cooma	n	62	29	0
Eden.....	u	61	49	0

M ss V'l	u	51	41	0
Euston	u	73	45	0
G'lb'rn	u	58	31	0
Wagga.	u	62	35	0
C. Geo.	c	64	46	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 6 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 6..... 9·174
Barometers corrected to 32° Fa and Mean Sea Level

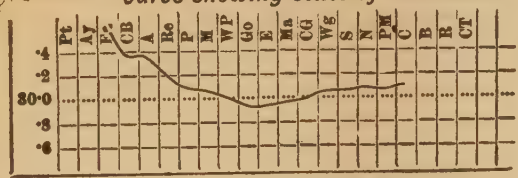
Stations.	wt	M'x	MO	R in
Casino ...	c	78	58	0
T'nt'rfield	c	70	44	0
Clarence.	g	79	61	0
Moree....	g	74	44	0·06
Grafton..	c	79	47	0
Gl'n Inn's	b	63	39	0·24
Inverell..	b	66	45	0
Bourke ..	n	68	34	0
Narrabri	n	68	45	0·03
Armidalc	c	60	55	0·23
B'ndem'r.	g	61	43	0·35
Gunned'h	b	68	48	0·54
C'namble	b	—	—	0
Lismore..	c	74	62	0·27
Walcha ..	u	60	39	0·46
Tamw'rth	c	67	44	0·54
Coonab'n	b	69	36	0
P.M'cqrie	b	72	54	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	62	44	0·92
Taree....	c	72	50	0·01
Cassilis ..	g	60	44	0·36
M'ss'lbr'k	c	68	43	0·76
Dubbo. ...	p	61	37	0·20
Menindie.	c	57	37	0
Singleton	b	62	40	0·75
N'ls'n sB	b	73	51	0·18
0 52				
Mudg	u	58	31	0·53
Ma tland.	b	67	50	0·49
Hill End.	p	—	—	0·49
N'wcastle	b	68	49	0·60
Orange ..	g	50	32	0 90
Bathurst	c	48	34	0·49
Forbes...	u	55	31	0·07
M. V'ct'ria	c	56	30	0·26
Carcoar..	u	49	39	0·48
Cond'b'l'n	u	41	26	0·03
Marsdens	u	60	41	0
Picton. ..	b	56	46	0 21
Sydney ..	b	60	48	0·13
Wentw'th	b	58	33	0
Young. ..	u	76	37	0·16
Woll'g'ng	b	62	46	0·15
Taralga..	s	71	22	0·20
Hay	b	61	32	0

Stations.	wt	M'x	MO	R'in
Queanbey'n	c	48	36	0
Deniliquin.	b	55	28	0·06
Moruya....	b	80	41	0
Kiandra...	s	41	27	0
Albury	b	53	38	0·10
Bodalla....	b	63	32	0
Cooma	n	60	30	0·04
Eden.....	b	56	45	0

M ss V'l	c	51	37	0·08
Euston	b	58	27	0
G'lb'rn	g	54	34	0·05
Wagga.	u	55	36	0·10
C. Geo.	b	58	44	0

23 30 66 R 4.

Curve showing state of Barometer.



Flag, wind N wind E wind S. wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy very heavy.

41 30·28 R 14

SHOWERY ON S COAST

W 28 30·40 R 39

23 A 51 30·31 R 28 D

23 53

52 34 Re

45 23 M

48 48 P

CO

49 18

WP 40 43

38 28

CG 42 45

Ma 14 48

E 28 50

Go 34 47

S 17 49

Wg 56 49

N 13 59

PM 14 55

G 14 64

B

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers fallen about 0·10 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 8 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 49·8s. *E.*

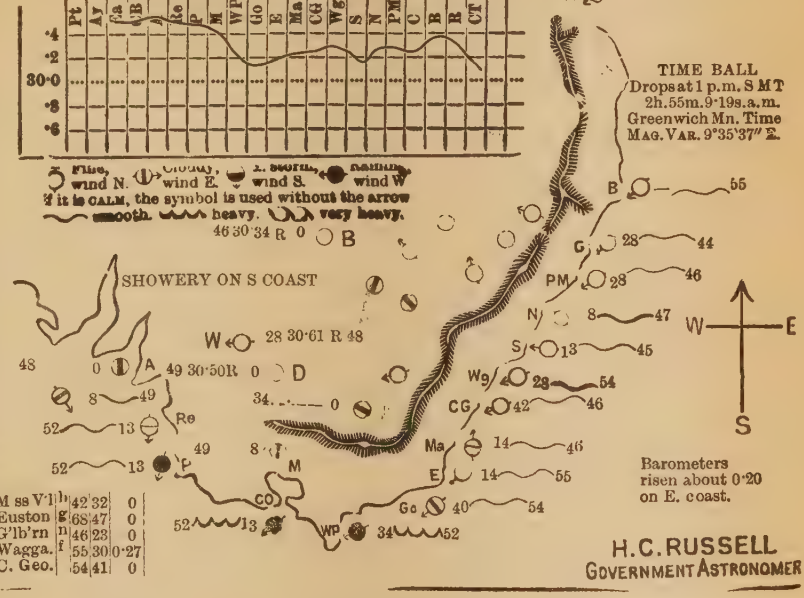
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 8..... 9·174
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	mn	R in
Casino ...	b	69	30	0
T'nt'rfield	n	54	19	0
Clarence..	b	72	42	0
Moree....	b	65	31	0
Grafton..	n	74	33	0
Gl'n Inn's	b	49	23	0
Inverell..	n	67	25	0
Bourke ..	n	70	38	0
Narrabri	n	75	40	0
Armidale	n	60	46	0
B'ndem'r.	n	46	21	0
Gunned'h	b	54	33	0
C'namble	b	—	—	0
Lismore..	–	—	—	–
Walcha ..	–	—	—	—
Tamw'rth	b	54	24	0
Coonab'n	b	72	30	0
P.M'cqrie	b	60	40	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	49	30	0
Taree....	b	59	39	0
Cassilis ..	n	47	31	0
M'ss'lbr'k	b	55	28	0
Dubbo. ...	–	—	—	—
Menindie.	g	55	48	0
Singleton	b	55	41	0
N'le'n sB	b	72	41	0
0 48				
Mudg	n	59	20	0
Ma tland.	b	62	42	0
Hill End.	n	—	—	0
N'wcastle	b	60	39	0
Orange ..	b	49	30	0
Bathurst	b	43	28	0
Forbes...	c	47	31	0
M.V'ct'ria	n	40	27	0
Carcoar..	s	42	35	0·07
Cond'b'l'n	u	40	23	0·02
Marsdens	f	53	39	0·08
Picton. ..	n	52	30	0
Sydney ..	b	55	42	0
Wentw'th	c	58	47	0
Young. ...	g	67	29	0·19
Woll'g'ng	b	57	43	0
Taralga..	b	56	25	0
Hay	b	61	31	0

Stations.	wt	m'x	mn	R in
Qeaunbey'n	c	47	29	0
Deniliquin.	b	59	34	0·10
Moruya....	b	78	49	0
Kiandra...	c	35	15	0
Albury	u	51	31	0·45
Bodalla....	n	71	28	0
Cooma	g	56	31	0·07
Eden	c	—	—	0

Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. L. storm, wind S. Raining, wind W
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 9 1885

Sydney Observatory.

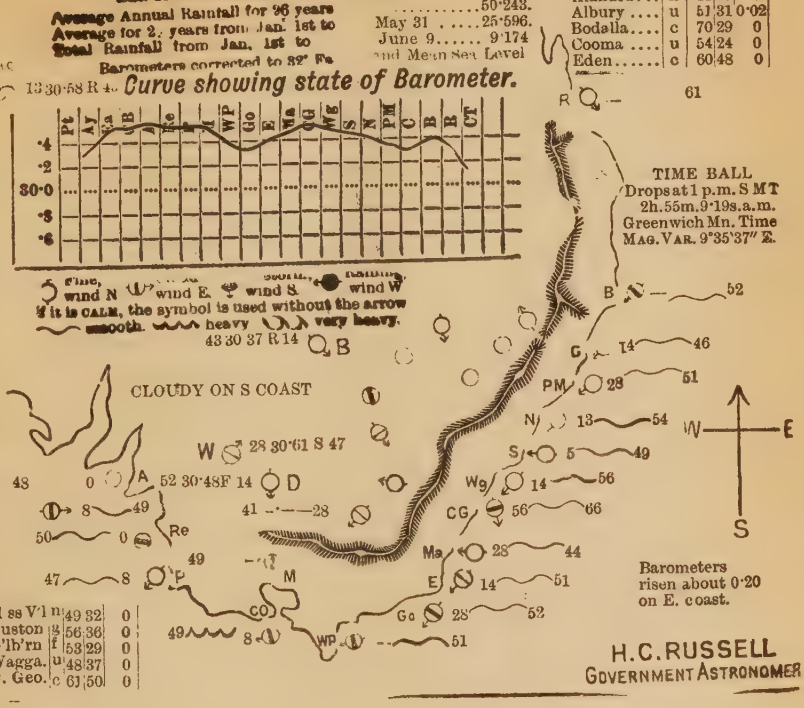
Lat. 33° 51′ 41″ S. ; Long. 10h. [illegible] E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 9..... 9·174
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	MN	R in
Casino ...	b	68	33	0
T'nt'rfield	b	62	26	0
Clarence..	b	73	42	0
Moree....	b	66	30	0
Grafton..	n	75	38	0
Gl'n Inn's	b	51	27	0
Inverell..	n	59	25	0
Bourke ..	b	60	36	0
Narrabri	b	62	35	0
Armidale	b	60	46	0
B'ndem'r.	n	48	23	0
Gunned'h	b	55	34	0
C'namble	b	—	—	0
Lismore..	—	—	—	—
Walcha..	n	51	23	0
Tamw'rth	b	57	28	0
Coonab'n	n	59	23	0
P.M'cqrie	b	63	44	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	50	33	0
Taree....	c	62	40	0
Cassilis ..	n	49	32	0
M'ss'lbr'k	c	56	30	0
Dubbo. ..	b	63	29	0
Menindie.	g	59	38	0
Singleton	b	47	38	0
N'ls'n sB	g	73	46	0·10
13 53				
Mudg	b	70	24	0
Ma tland.	u	59	41	0
Hill End.	f	—	—	0
N'wcastle	c	66	46	0
Orange ..	b	41	30	0
Bathurst	f	51	31	0
Forbes. ..	g	49	31	0
M.V'ct'ria	u	49	33	0
Carcoar..	n	45	36	0
Cond'b'l'n	u	43	25	0
Marsdens	u	50	41	0
Picton. ..	n	59	35	0
Sydney ..	b	61	46	0
Wentw'th	c	51	41	0
Young. ..	g	66	35	0
Woll'g'ng	b	67	47	0
Taralga..	n	71	32	0
Hay	n	59	31	0

Stations.	wt	M'x	MN	R in
Queanbey'n	f	48	31	0
Deniliquin.	b	59	35	0
Moruya....	b	66	40	0
Kiandra...	n	42	10	0
Albury	u	51	31	0·02
Bodalla....	c	70	29	0
Cooma	u	54	24	0
Eden.....	c	60	48	0

M ss V'l n	g	49	32	0
Euston	g	56	36	0
G'lb'rn	f	53	29	0
Wagga.	u	48	37	0
C. Geo.	c	61	50	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 10 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·2s. *E.*

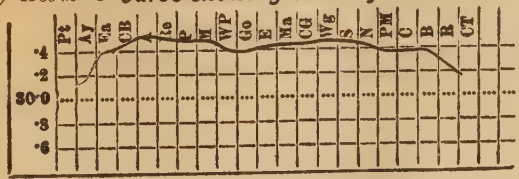
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 10..... 9·174
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	c	73	40	0
T'nt'rfield	u	63	36	0
Clarence.	u	68	55	0·10
Moree....	u	74	55	0
Grafton...	u	79	43	0
Gl'n Inn's	u	64	35	0
Inverell..	u	57	34	0
Bourke ..	b	66	40	0
Narrabri	b	64	41	0
Armidalc	u	60	46	0
B'ndem'r.	u	57	33	0
Gunned'h	c	57	40	0
C'namble	-	—	—	–
Lismore..	u	71	56	0·20
Walcha..	–	—	—	–
Tamw'rth	c	64	30	0
Coonab'n	c	63	28	0
P.M'cqrie	c	66	51	0
W'lcannia	b	—	—	0
M'rr'r'ndi	f	54	35	0
Taree....	c	64	39	0·01
Cassilis ..	u	52	35	0
M'ss'lbr'k	o	60	38	0
Dubbo. ..	b	65	36	0
Menindie.	b	58	44	0
Singleton	g	60	42	0
N'ls'n sB	g	54	46	1·20
8 49 Mudg	b	68	28	0
Ma tland.	u	68	48	0
Hill End.	n	—	—	0
N'wcastle	c	63	52	0·03
Orange ..	b	49	31	0
Bathurst	n	57	28	0
Forbes...	b	45	32	0
M.V'ct'ria	u	49	35	0
Carcoar..	b	50	33	0
Cond'b'l'n	n	—	25	0
Marsdens	c	56	40	0
Picton. ..	g	58	39	0
Sydney ..	d	61	47	0·14
Wentw'th	g	61	45	0
Young. ..	g	73	36	0
Woll'g'ng	g	65	49	0
Taralga..	g	69	31	0
Hay	g	72	29	0

Stations.	wt	M'x	Mn	R'in
Queanbey'n	u	50	34	0
Deniliquin.	g	68	33	0
Moruya....	c	60	42	0
Kiandra...	f	35	6	0
Albury	c	47	37	0
Bodalla....	g	71	32	0
Cooma	n	60	19	0
Eden.....	b	59	44	0

13 30 50 F 4

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Rain, wind S. Hail, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy. very heavy.

44 30 29 F 14

CLOUDY ON S COAST

W 28 30·46 F 49

48 8 A 48 30·28 F 0 D

8 50

50 13 Re

47 8 P

M

CO

45 8 WP 8 48

32 14

Wg 28 56

CG 28 53

Ma 28 45

E 28 46

Go 23 50

R 63

B 57

C 14 55

PM 14 56

N 8 54

S 3 49

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers risen about 0·02 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 1[1] 1885

9 a.m.

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·9s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 11..... 9·911

Barometers corrected to 32° Fa and Mean Sea Level

0 30 47 F 40 *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. Showery, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy very heavy.

51 30 23 F 14 B

CLOUDY ON COAST

W 28 30·47 R 38

51 0 A 38 30·44 R 0 D

37 14

42 8 47

42 8 Re

43

45 0 P M

50 8 CO

WP 8 47

Ma 14 50

E 14 50

Go 18 50

S 7 51

Wg 14 53

CG 42 54

N 0 59

PM 14 56

G 14 55

B 60

R 0 54

TIME BALL
Drops at 1 p.m. S M T
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W — E
S

Barometers fallen about 0·05 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

Stations.	wt	m'x	mn	R in
Casino ...	c	70	47	0
Fat'rfield	c	61	44	0
Clarence .	u	66	55	0·21
Moree....	u	75	53	0·06
Grafton ..	c	73	46	0
Gl'n Inn's	u	63	34	0
Inverell..	u	62	43	0·13
Bourke ..	c	70	44	0
Narrabri	u	65	42	0
Armidale	u	54	50	0·13
B'ndem'r.	u	56	36	0·03
Gunned'h	u	63	46	0
C'namble	b	—	—	0
Lismore..	g	68	55	0
Walcha ..	u	57	37	0
Tamw'rth	g	67	43	0·14
Coonab'n	g	68	35	0
P.M'cqrie	c	67	52	0·14
W'lcannia	c	—	—	0
M'rr'r'ndi	g	55	42	0·04
Taree....	c	66	51	0·06
Cassilis ..	u	54	46	0
M'ss'lbr'k	u	63	39	0·02
Dubbo. ..	b	69	38	0
Menindie.	b	58	39	0
Singleton	u	60	47	0
N'ls'n sB	g	60	51	0
8 50				
Mudg	b	72	30	0
Ma tland.	c	62	47	0
Hill End.	f	—	—	0
N'wcastle	c	65	50	0
Orange ..	c	51	31	0
Bathurst	f	63	30	0
Forbes...	b	43	31	0
M.V'ct'ria	n	52	35	0
Carcoar..	—	—	—	—
Cond'b'l'n	c	42	26	0
Marsdens	n	61	41	0
Picton. ..	b	57	39	0·01
Sydney ..	g	55	49	0·59
Wentw'th	n	60	32	0
Young. ..	b	78	65	0
Woll'g'ng	b	58	43	0·05
Taralga..	u	65	36	0
Hay	f	62	35	0

Stations.	wt	m'x	mn	R'in
Queanbey'n	c	52	37	0
Deniliquin.	f	55	30	0
Moruya....	g	54	45	0
Kiandra...	n	32	9	0
Albury	n	58	35	0
Bodalla....	g	70	28	0
Cooma	n	58	24	0
Eden.....	g	55	46	0

M ss V'l	f	42	38	0
Euston	f	69	23	0
G'lb'rn	u	56	34	0
Wagga.	b	57	31	0
C. Geo.	p	66	51	0·97

METEOROLOGY.

9 A.M. JUNE 12 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·0s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 12..... 9·947

Barometers corrected to 32° Fa and Mean Sea Level

0 30·45 R 49 *Curve showing state of Barometer.*

Stations.	wt	m'x	mn	R in
Casino ...	r	75	55	0·49
T'nt'rfield	—	—	—	—
Clarence.	p	70	54	1·83
Moree....	r	68	54	0·58
Grafton..	r	75	54	0·55
Gl'n Inn's	d	64	47	0·10
Inverell..	r	63	50	0·14
Bourke ..	u	72	51	0·08
Narrabri	r	76	51	0·28
Armidalc	u	56	50	0·09
B'ndem'r.	d	60	42	0·05
Gunned'h	—	—	—	—
C'namble	g	—	—	0·60
Lismore..	d	70	60	0·56
Walcha ..	g	58	46	0
Tamw'rth	g	64	51	0·12
Coonab'n	p	60	45	0·33
P.M'cqrie	r	68	52	0·24
W'lcannia	d	—	—	0
M'rr'r'ndi	r	54	49	0·30
Taree....	r	68	51	0·10
Cassilis ..	r	62	50	0·17
M'ss'lbr'k	r	62	48	0·18
Dubbo...	r	64	44	0·09
Menindie.	u	56	44	0
Singleton	r	58	50	0·25
N'ls'n sB	d	62	49	0·22
↑ 23 50				
⊖ Mudg	r	71	31	0·03
Ma tland.	c	62	47	0
Hill End.	u	—	—	0·05
N'wcastle	r	62	54	0·30
Orange ..	r	52	34	0·04
Bathurst	r	59	31	0
Forbes...	u	65	30	0
M.V'ct'ria	r	53	40	0·12
Carcoar..	u	55	41	0
Cond'b'l'n	r	50	28	0·03
Marsdens	u	65	40	0
Picton...	u	62	48	0·01
Sydney ..	d	61	52	0·04
Wentw'th	g	61	30	0
Young...	u	75	41	0
Woll'g'ng	c	66	49	0
Taralga..	u	66	32	0
Hay	g	62	32	0

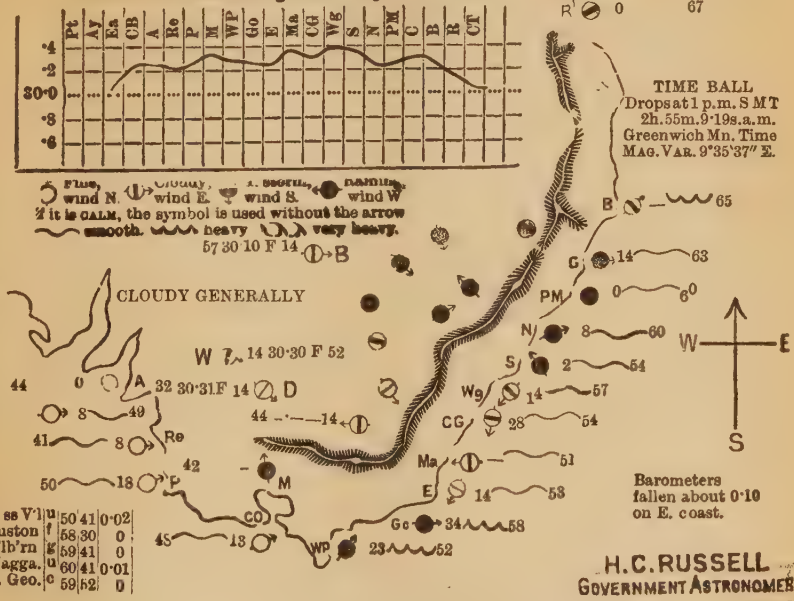
Stations.	wt	m'x	mn	R'in
Qeaunbey'n	c	53	38	·0
Deniliquin.	u	51	38	0·12
Moruya....	g	61	49	0
Kiandra...	g	40	15	0
Albury	u	62	36	0
Bodalla....	g	71	44	0
Cooma	g	60	28	0
Eden.....	u	57	48	0

Stations.	wt	m'x	mn	R'in
M ss V'l	u	50	41	0·02
Euston	f	58	30	0
G'lb'rn	g	59	41	0
Wagga.	u	60	41	0·01
C. Geo.	c	59	52	0

Flue, wind N. Cloudy, wind E. Fresh, wind S. Raining, wind W

If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.



Barometers fallen about 0·10 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 13 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 59·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 13.....10·944
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	MN	R'in
Casino ...	u	72	59	0·73
T'nt'rfield	u	57	53	1·20
Clarence.	r	70	53	0·87
Moree....	r	62	55	1·40
Grafton..	u	66	61	1·00
Gl'n Inn's	r	58	44	1·24
Inverell..	u	59	55	3·18
Bourke ..	u	59	54	0·31
Narrabri	u	75	50	1·75
Armidale	u	57	55	1·56
B'ndem'r.	u	60	53	1·09
Gunned'h	u	60	55	1·48
C'namble	u	—	—	1·50
Lismore..	r	72	63	1·13
Walcha ..	u	53	48	1·52
Tamw'rth	u	60	54	0·87
Coonab'n	r	59	50	1·95
P.M'cqrie	g	70	59	2·53
W'lcannia	u	—	—	0
M'rr'r'ndi	u	60	51	1·15
Taree....	c	64	50	1·56
Cassilis ..	b	64	53	1·18
M'ss'lbr'k	d	61	52	0·61
Dubbo. ..	o	59	53	0·71
Menindie.	u	57	44	0
Singleton	u	59	55	0·63
N'ls'n sB	g	68	54	1·22
Mudg	u	58	45	1·07
Ma tland.	g	63	57	1·18
Hill End.	r	—	—	0 67
N'wcastle	g	63	60	1·64
Orange ..	r	53	45	0·95
Bathurst	u	56	48	0·75
Forbes. ..	r	56	43	0·38
M.V'ct'ria	g	54	50	1·10
Carcoar..	g	53	45	0·43
Cond'b'l'n	f	53	36	0·35
Marsdens	d	58	50	0·30
Picton. ..	f	57	52	1·27
Sydney ..	g	64	54	1·00
Wentw'th	gf	60	30	0
Young. ..	r	79	44	0·37
Woll'g'ng	g	64	55	1·30
Taralga..	g	73	32	1·00
Hay	gf	—	—	0

Stations.	wt	M'x	MN	R'in
M ss V'l	u	53	48	0·97
Euston	r	62	32	0
G'lb'rn	g	52	44	0·68
Wagga.	g	54	35	0·06
C. Geo.	g	60	54	1·51

Stations.	wt	M'x	MN	R'in
Qeaunbey'n	f	50	43	0·86
Deniliquin.	f	59	41	0
Moruya....	c	59	51	1·11
Kiandra...	r	43	35	0·44
Albury	u	58	44	0·10
Bodalla....	f	63	46	0·99
Cooma	m	50	30	0·20
Eden.....	f	60	52	0·95

R ○ 0 64

8 30·26 [illegible] *Curve showing state of Barometer.*

Fine, wind N. Cloudy, wind E. Rain, wind S. Gales, wind W.
If it is CALM, the symbol is used without the wind.
smooth heavy very heavy.

65 30·14 R 0 B

CLOUDY GENERALLY

W 14 30·09 F 42

52 23 A 45 30·13 F 0 D

23 51 50 14

46 23 Re 49 8 S M

45 18 P

45 8 CO WP 13 52

Wg 14 61

CG 42 58

Ma 14 53

E 0 55

Go 18 59

N 0 61

S 8 61

PM 28 66

C 28 65

B 67

TIME BALL
Drops at 1 p.m. S M T
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers fallen about 0·28 on E. coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

6 A.M. JUNE 15 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 50·9s. E.

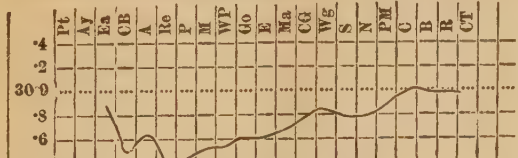
Average Annual Rainfall for 26 years .....50·243.
Average for 2 years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 15.....11 044

Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	W't	M'x	Mn	R'in
Casino...	—	—	—	—
T'nt'rfield	c	68	50	0·15
Clarence.	g	77	65	0
Moree....	u	71	61	0·11
Grafton..	c	77	59	0
Gl'n Inn's	p	63	49	0·26
Inverell..	r	65	55	0·21
Bourke..	u	63	46	0·80
Narrabri	r	70	40	0·50
Armidale	u	69	47	0·13
B'ndem'r.	r	7[illegible]	48	0·36
Gunned'h	r	[illegible]	[illegible]	[illegible]
C'namble	r	—	—	2·0[illegible]
Lismore..	c	72	6[illegible]	[illegible]
Walcha..	c	60	51	0
Tamw'rth	r	70	54	0·[illegible]
Coonab'n	r	67	53	1·[illegible]
P.M'cqrie	g	75	60	[illegible]
W'lcannia	b	—		
M'rr'r'ndi	r	65	57	0·85
Taree....	g	69	55	0·02
Cassilis..	r	69	55	1·05
M'ss'lbr'k	d	70	52	0·5[illegible]
Dubbo....	r	64	54	0·[illegible]9
Menindie.	b	67	45	0·27
Singleton	r	67	55	0·57
N'ls'n sR	r	74	54	0
34 54 Mudg	r	69	45	0·80
Ma tland.	r	84	62	0·52
Hill End.	r	—	—	1·53
N'wcastle	g	70	59	0·55
Orange..	r	55	47	1·63
Bathurst	r	64	50	0·80
Forbes...	c	57	52	0·63
M.V'ct'ria	p	59	45	0·30
Carcoar..	r	57	47	0·72
Cond'b'l'n	g	55	40	0·29
Marsdens	c	63	53	0·52
Picton....	u	66	55	0·13
Sydney..	u	69	60	0·10
Wentw'th	b	68	44	0·31
Young....	g	57	51	0·96
Woll'g'ng	g.	73	60	0·08
Taralga..	p	71	30	0·20
Hay.....	b	61	44	0·55

Stations.	W't	M'x	Mn	R'in
Qeaunbey'n	c	68	43	0·67
Deniliquin.	b	61	44	0·52
Moruya....	c	71	61	0
Kiandra...	r	45	35	4·16
Albury	u	59	50	1·20
Bodalla....	c	74	48	0
Cooma	p	59	43	0·13
Eden.....	u	64	51	0
M ss V'l	b	—	—	—
		71	38	0
Euston		62	48	0·07
G'lb'rn	u	59	38	0·34
Wagga.	c	68	54	0
C. Geo.				

0 30 54 6 5. *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy very heavy.

58 29 93 F — B

CLOUDY GENERALLY

W — 30·21 R 46

D

51 — 14

50 28 A

40 55

55 48 Re

53 18 M

51 34 P

CG

50 13

WP 18 53

Go 18 58

E 14 53

Ma 28 60

CG 42 60

Wg 14 61

S 7 60

N 13 67

PM 14 67

G 14 65

B

R

TIME BALL
Drops at 1 p.m. S MT
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

W E S

Barometers fallen about 0·25 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 16 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 19·8s. E.

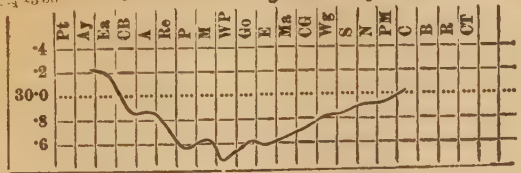
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 16.....11 074
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino ...	–	—	—	—
T'nt'rfield	–	—	—	—
Clarence.	g	77	65	0·75
Moree....	b	66	53	0·21
Grafton..	r	79	60	0·31
Gl'n Inn's	r	61	50	0·84
Inverell..	u	65	55	0·19
Bourke ..	b	69	39	0
Narrabri	b	70	45	0·38
Armidalc	b	60	58	0·53
B'ndem'r.	–	—	—	—
Gunned'h	f	61	47	0·56
C'namble	–	—	—	—
Lismore..	p	80	65	0
Walcha ..	c	57	39	0·09
Tamw'rth	c	62	43	1·21
Coonab'n	c	58	48	0·31
P.M'cqrie	c	70	50	0·20
W'lcannia	b	—	—	0
M'rr'r'ndi	c	59	51	0·67
Taree....	b	88	45	0·01
Cassilis ..	c	52	43	0·19
M'ss'lbr'k	c	62	47	0
Dubbo...	b	63	52	0·05
Menindie.	b	65	48	0
Singleton	b	63	51	0·38
N'ls'n sB	b	79	47	0·06
13 53 Mudg	u	61	36	0·15
Ma tland.	b	64	52	0·08
Hill End.	u	—	—	0·16
N'wcastle	b	65	51	0·05
Orange ..	g	52	44	0·56
Bathurst	c	55	48	0·30
Forbes...	g	63	50	0
M.V'ct'ria	c	51	42	0·05
Carcoar..	b	55	49	0·14
Cond'b'l'n	c	52	33	0
Marsdens	c	63	52	0
Picton...	g	64	44	0
Sydney ..	b	61	54	0·03
Wentw'th	c	63	45	0·01
Young....	r	64	46	0·05
Woll'g'ng	b	69	53	0
Taralga..	b	61	25	0·20
Hay.....	b	61	49	0

Stations.	wt	M'x	Mn	R in
Qeaunbey'n	g	58	47	0·15
Deniliquin.	u	61	46	0·05
Moruya....	b	72	56	0
Kiandra...	s	42	34	0
Albury	u	60	48	0·13
Podalla....	r	73	51	0
Cooma	g	59	41	0
Eden	c	65	47	0

13 30·47 R 30

Curve showing state of Barometer.



Fine, wind N; Cloudy, wind E.; Rain, wind S.; Rain, wind W.
If it is CALM, the symbol is used without the arrow
smooth; heavy; very heavy.

55 30·00 F 28 B

TIME BALL
...sat 1 p.m. S M T
...5m. 9·19s. a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

CLOUDY GENERALLY

W 56 29·92 F 50

53 23 A 47 R 29·85 28 D

8 52

54 23 Re

52 18 M

49 28 P

48 13 CO

WP 18 49

50 — — 42

Ma 42 61

E 28 59

Go 23 56

Wg 28 58

CG 42 58

S 3 58

N 8 57

PM 14 54

C 14 64

B

W E S

M ss V'l b 57 53 0
Euston u 63 43 0
G'lb'rn b 59 44 0·16
Wagga. u 62 35 0·02
C. Geo. b 64 53 0

Barometers fallen about 0·10 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 17 1885

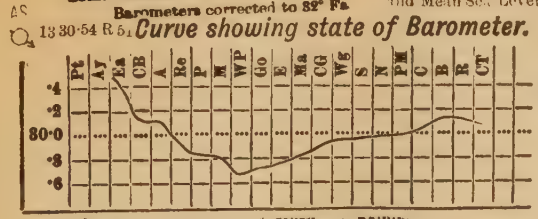
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 50·0s. *E.*

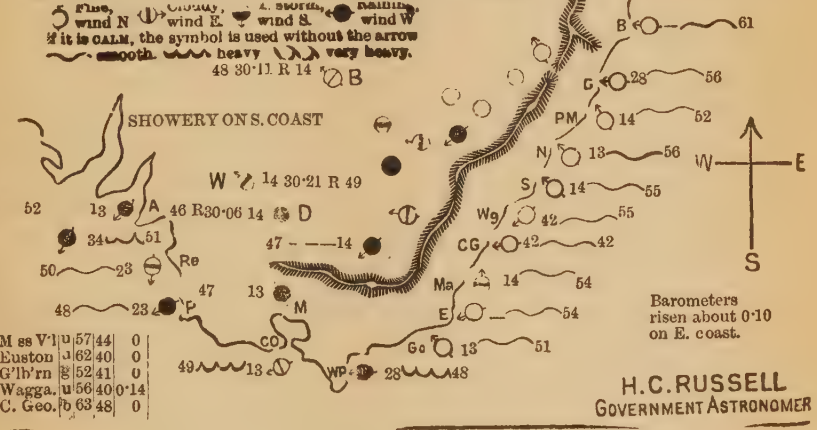
Average Annual Rainfall for 26 years ....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 17.....11 071
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	m'x	Mn	R in
Casino ...	b	75	41	0
T'nt'rfield	b	58	35	0·14
Clarence.	b	73	52	0
Moree....	–	—	—	—
Grafton..	b	79	49	0
Gl'n Inn's	–	—	—	—
Inverell..	–	—	—	—
Bourke ..	c	65	43	0
Narrabri	–	—	—	
Armidalc	b	60	56	0
B'ndem'r.	–	—	—	—
Gunned'h	–	—	—	—
C'namble	b	—	—	0
Lismore..	c	73	57	0
Walcha..	f	55	39	0
Tamw'rth	b	60	43	0
Coonab'n	b	61	36	0
P.M'cqrie	b	61	43	0
W'lcannia	b	—	—	0
M'rr'r'ndi	–	—	—	—
Taree....	b	70	45	0
Cassilis ..	c	53	48	0
M'ss'lbr'k	–	—	—	—
Dubbo. ..	c	63	50	0
Menindie.	b	65	48	0
Singleton	–	—	—	—
N'le'n s B	b	78	52	0
0 54 Mudg	b	63	37	0·03
Ma tland.	b	68	51	0
Hill End.	u	—	—	0·03
N'wcastle	b	65	51	0
Orange ..	r	49	40	0·35
Bathurst	u	54	42	0·14
Forbes...	u	60	39	0
M.V'ct'ria	u	50	38	0
Carcoar..	u	53	41	0·31
Cond'b'l'n	u	49	35	0·01
Marsdens	u	59	43	0·01
Picton...	b	63	49	0
Sydney ..	b	65	51	0
Wentw'th	c	63	45	0
Young...	p	59	49	0·17
Woll'g'ng	b	67	49	0
Taralga..	g	58	28	0·15
Hay.....	u	58	40	0

Stations.	wt	m'x	Mn	R'in
Queanbey'n	c	51	43	0·36
Deniliquin.	d	57	42	0
Moruya....	c	65	49	0
Kiandra...	r	38	31	0
Albury	r	53	47	0·12
Bodalla....	c	68	32	0
Cooma	g	55	37	0·10
Eden.....	b	65	48	0



Fine, wind N. Cloudy, wind E. Storm, wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy. very heavy.



TIME BALL
Drops at 1 p.m. S MT
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers risen about 0·10 on E. coast.

M ss V'l	u	57	44	0
Euston	u	62	40	0
G'lb'rn	g	52	41	0
Wagga.	u	56	40	0·14
C. Geo.	b	63	48	0

H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 18 1885

9 A.M.

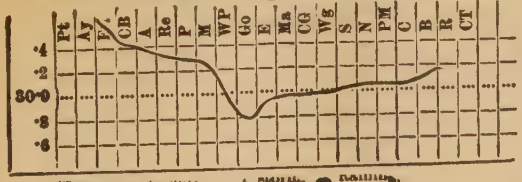
Sydney Observatory.

Lat. 33° 51′ 41″ *S.*; *Long.* 10h. 4m. 10·0s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 18.....11 071

Barometers corrected to 32° Fa. Mean Sea Level

23 30·57 R— *Curve showing state of Barometer.*



Fine, wind N. Cloudy, wind E. Storm, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow.
smooth. heavy very heavy.

45 30·17 R 28 B

SHOWERY ON S. COAST

W 14 30·40 R 41

52 R 30·28— D

36 — — — 0

Stations.	wt	M'x	Mn	R in
Casino ...	b	72	40	0
T'nt'rfield	c	55	41	0
Clarence.	b	73	51	0
Moree....	b	67	42	0
Grafton..	o	75	44	0
Gl'n Inn's	g	54	36	0
Inverell..	b	65	36	0
Bourke ..	g	65	41	0
Narrabri	b	64	41	0
Armidale	c	56	52	0
B'ndem'r.	r	55	41	0·09
Gunned'h	b	59	44	0
C'namble	b	—	—	0
Lismore..	b	72	45	0
Walcha ..	u	52	35	0·08
Tamw'rth	c	58	44	0·04
Coonab'n	b	60	37	0·08
P.M'cqrie	b	67	41	0
W'lcannia	b	—	—	0
M'rr'r'ndi	b	54	44	0·18
Taree....	b	66	42	0
Cassilis ..	u	55	43	0·09
M'ss'lbr'k	o	64	43	0·10
Dubbo....	r	61	51	0·09
Meniindie.	b	64	43	0·06
Singleton	b	61	48	0
N'ls'n sB	b	76	59	0
8 59 Mudg	c	59	32	0·25
Ma tland.	c	61	48	0
Hill End.	u	—	—	0·46
N'wcastle	b	65	47	0
Orange ..	r	47	34	0·67
Bathurst	u	52	38	0·21
Forbes...	o	58	44	0·23
M.V'ct'ria	u	46	33	0·05
Carcoar..	sr	51	40	0·40
Cond'b'l'n	u	47	30	0·28
Marsdens	u	55	45	0·32
Picton...	g	60	50	0
Sydney ..	o	62	49	0
Wentw'th	b	57	54	0·06
Young....	u	58	41	0·39
Woll'g'ng	b	65	48	0
Taralga..	c	64	30	0·10
Hay	b	51	36	0·12

Stations.	wt	M'x	Mn	R in
Queanbey'n	b	51	39	0·04
Deniliquin.	b	55	37	0·17
Moruya....	c	66	44	0
Kiandra...	s	36	16	0
Albury	f	50	35	0·26
Bodalla....	b	68	37	0
Cooma	m	55	33	0
Eden.....	u	65	47	0·04

M ss V'l	b	55	39	0·01
Euston	b	60	33	0
G'lb'rn	g	52	36	0·10
Wagga.	b	55	39	0·23
C. Geo.	g	64	46	0

TIME BALL
Drops at 1 p.m. S MT
2h.55m.9·19s.a.m.
Greenwich Mn. Time
MAG. VAR. 9°35′37″ E.

Barometers risen about 0·15 on S. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

JUNE 19 1885

9 A.M.

Sydney Observatory.

Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 59·9s. E.

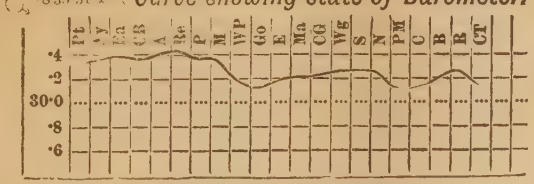
Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 19.....12·790
Barometers corrected to 32° Fa. and Mean Sea Level

Stations.	wt	M'x	Mn	R in
Casino...	c	67	39	0
T'nt'rfield	c	48	34	0
Clarence.	b	70	47	0
Moree....	b	51	38	0
Grafton..	o	69	44	0
Gl'n Inn's	b	49	32	0·13
Inverell..	b	65	36	0
Bourke..	b	57	36	0
Narrabri	b	63	31	0
Armidale	b	52	49	0·07
B'ndem'r.	b	45	26	0·19
Gunned'h	b	52	36	0
C'namble	–	—	—	
Lismore..	c	66	49	0
Walcha..	c	43	35	0·34
Tamw'rth	b	52	40	0·03
Coonab'n	n	51	28	0·02
P.M'cqrie	b	62	46	0·28
W'lcannia	b	—	—	0
M'rr'r'ndi	o	47	43	0·05
Taree....	g	61	45	1·28
Cassilis..	n	48	36	0
M'ss'lbr'k	g	52	42	0·08
Dubbo....	f	49	28	0
Menindie.	u	55	49	0
Singleton	u	56	49	0·40
N'ls'n sB	o	75	45	4·15
0 57				
Mudg	n	53	22	0
Ma tland.	g	81	54	0·94
Hill End.	b	—	—	0
N'wcastle	g	57	45	0·91
Orange..	n	43	31	0
Bathurst	n	45	35	0
Forbes...	f	56	26	0
M.V'ct'ria	n	43	31	0
Carcoar..	n	45	35	0·07
Cond'b'l'n	f	38	24	0
Marsdens	f	54	41	0
Picton...	b	55	45	0
Sydney..	b	52	46	1·72
Wentw'th	g	57	40	0
Young...	n	67	29	0
Woll'g'ng	b	57	46	0·17
Taralga..	b	59	20	0
Hay.....	d	53	33	0

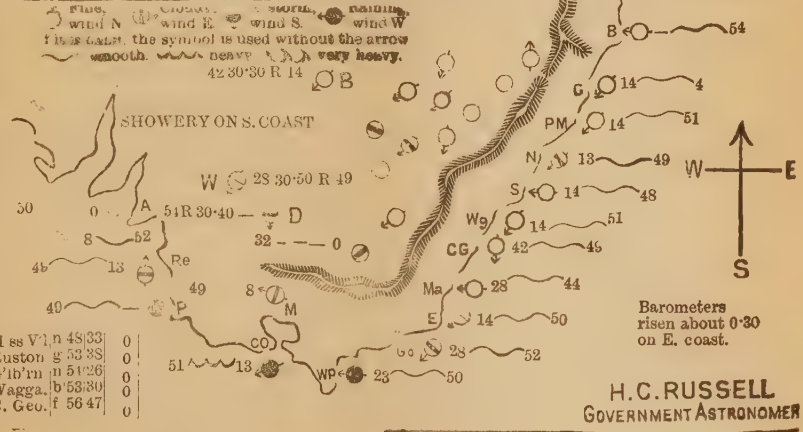
Stations.	wt	M'x	Mn	R in
Queanbey'n	n	49	32	0
Deniliquin.	u	54	37	0
Moruya....	b	59	38	0
Kiandra...	nf	32	5	0
Albury	nf	53	31	0
Bodalla....	b	80	29	0
Cooma	g	47	33	0·02
Eden.....	c	56	45	0

Stations.	wt	M'x	Mn	R in
M ss V'l	n	48	33	0
Euston	g	53	38	0
G'lb'rn	n	51	26	0
Wagga.	b	53	30	0
C. Geo.	f	56	47	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. Storm, wind S. Raining, wind W.
If the Gauge, the symbol is used without the arrow.
Smooth. Heavy. Very heavy.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 20 1885

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long. 10h. 4m. 52·8s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 20.....12·793
Barometers corrected to 32° Fa. and Mean Sea Level

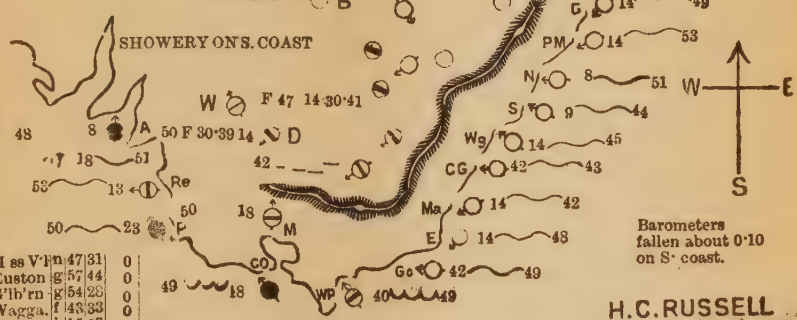
Curve showing state of Barometer.

Fine, wind N. Cloudy, wind E. Showery, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

Stations.	wt	M'x	Mn	R in
Casino ...	b	68	38	0
T'nt'rfield	b	57	30	0
Clarence.	c	69	47	0
Moree....	b	65	36	0
Grafton..	b	71	44	0
Gl'n Inn's	b	49	30	0
Inverell..	b	65	31	0
Bourke ..	b	59	32	0
Narrabri	n	60	36	0
Armidale	f	51	48	0
B'ndem'r.	f	47	32	0
Gunned'h	b	56	36	0
C'namble	–	—	—	—
Lismore..	c	67	45	0
Walcha ..	c	47	27	0
Tamw'rth	b	57	33	0
Coonab'n	n	57	24	0
P.M'cqrie	b	61	47	0
W'lcannia	b	—	—	0
M'rr'r'ndi	n	53	35	0
Taree....	b	60	49	0·01
Cassilis ..	n	50	34	0
M'ss'lbr'k	b	59	32	0
Dubbo. ..	fn	53	26	0
Menindie.	g	60	39	0
Singleton	b	58	40	0
N'ls'n sB	–	—	—	—
0 56				
Mudg	n	68	20	0
Ma tland.	b	59	37	0
Hill End.	n	—	—	0
N'wcastle	b	59	45	0·05
Orange ..	n	46	25	0
Bathurst	fn	57	25	0
Forbes...	b	45	32	0
M. V'ct'ria	n	48	32	0
Carcoar..	b	42	33	0
Cond'b'l'n	u	43	26	0
Marsdens	g	49	40	0
Picton. ..	n	57	30	0
Sydney ..	b	57	43	0
Wentw'th	g	56	46	0
Young. ..	g	71	32	0
Woll'g'ng	b	63	44	0
Taralga..	n	61	20	0
Hay	u	51	42	0

Stations.	wt	M'x	Mn	R in
M ss V'l	n	47	31	0
Euston	g	57	44	0
G'lb'rn	g	54	28	0
Wagga.	f	43	33	0
C. Geo.	b	55	37	0

Stations.	wt	M'x	Mn	R in
Queanbey'n	fg	47	34	0
Deniliquin.	u	52	38	0
Moruya....	b	63	48	0
Kiandra...	r	33	10	0
Albury	g	49	32	0
Bodalla....	b	66	27	0
Cooma	fn	57	21	0
Eden.....	b	55	42	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 22 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·8s. *E.*

Average Annual Rainfall for 26 years .....50·243.
Average for 2½ years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 22.....14·738
Barometers corrected to 32° Fa and Mean Sea Level

0 30·54 R 20 *Curve showing state of Barometer.*

wind N. wind E. wind S. wind W

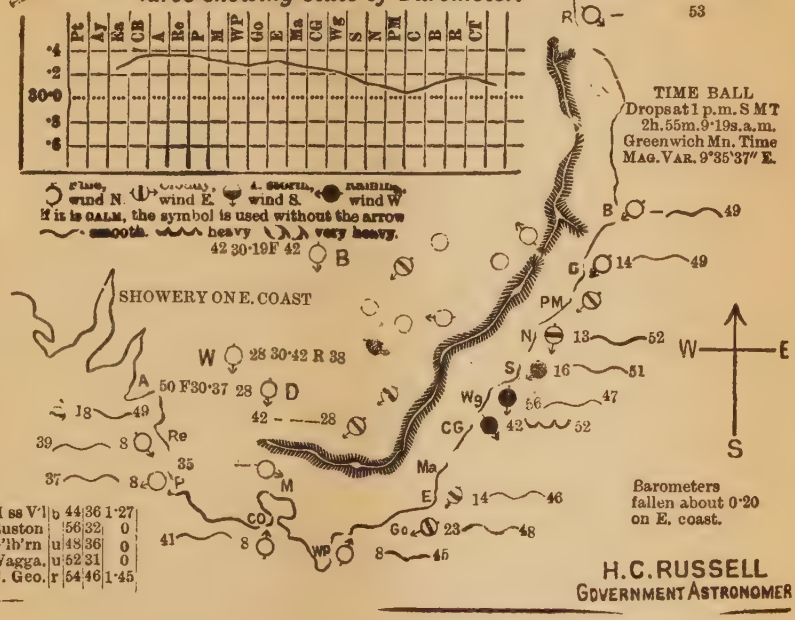
If it is CALM, the symbol is used without the arrow

smooth. heavy very heavy.

Stations.	wt	m'x	mn	R in
Casino ...	b	64	40	0·07
T'nt'rfield	b	61	29	0·07
Clarence .	o	65	49	0·15
Moree....	b	64	34	0
Grafton ..	b	72	47	0·73
Gl'n Inn's	n	60	29	0
Inverell..	b	66	32	0
Bourke ..	b	51	39	0
Narrabri	c	60	35	0
Armidalc	u	52	48	0·12
B'ndem'r.	u	55	40	0·03
Gunned'h	g	57	39	0
C'namble	—	—	—	—
Lismore..	b	60	47	0·61
Walcha ..	g	53	37	0·47
Tamw'rth	c	59	41	0·08
Coonab'n	b	59	26	0
P.M'cqrie	g	64	51	0·20
W'lcannia	b	—	—	0
M'rr'r'ndi	u	53	38	0
Taree....	g	65	52	0·01
Cassilis ..	—	—	—	—
M'ss'lbr'k	g	62	36	0
Dubbo. ..	b	59	33	0
Menindie.	f	62	42	0
Singleton	u	58	42	0
N'ls'n sB	r	79	55	0·46
18 55 Mudg	b	66	23	0
Ma tland.	n	69	49	0·05
Hill End .	b	—	—	0
N'wcastle	g	60	49	0·17
Orange ..	c	46	34	0·03
Bathurst	g	54	27	0
Forbes. ..	b	58	29	0
M. V'ct'ria	sr	48	33	0·10
Carcoar..	b	47	32	0
Cond'b'l'n	b	48	29	0
Marsdens	c	51	41	0
Picton. ..	d	56	45	0·22
Sydney ..	r	58	42	1·95
Wentw'th	b	56	31	0
Young. ..	p	67	44	0
Woll'g'ng	r	58	46	1·90
Taralga..	r	61	21	0·42
Hay	b	55	26	0

Stations.	wt	m'x	mn	R in
Queanbey'n	u	49	33	0
Deniliquin.	b	57	35	0
Moruya....	—	—	—	—
Kiandra...	n	34	23	0
Albury	g	57	27	0
Bodalla....	-	—	—	—
Cooma	g	51	29	0·02
Eden.....	c	55	42	

M ss V'l	b	44	36	1·27
Euston		56	32	0
G'lb'rn	u	48	36	0
Wagga.	u	52	31	0
C. Geo.	r	54	46	1·45



H.C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 23 1885

Sydney Observatory.

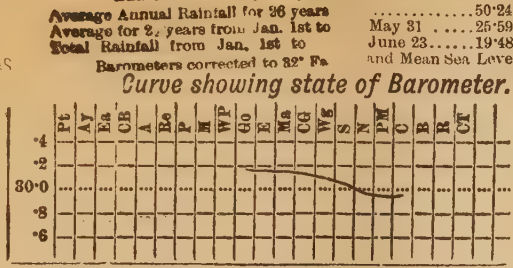
Lat. 33° 51′ 41″ S. ; *Long.* 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years .....50·243.
Average for 2, years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 23.....19·488
Barometers corrected to 32° Fa and Mean Sea Level

Stations.	wt	m'x	MD	R in
Casino ...	b	69	42	0
T'nt'rfield	u	54	35	0
Clarence .	g	70	48	0
Moree....	b	62	33	0
Grafton ..	b	72	44	0
Gl'n Inn's	u	50	31	0
Inverell ..	c	66	31	0
Bourke ..	b	58	38	0
Narrabri	c	60	35	0
Armidalc	u	51	48	0
B'ndem'r.	d	55	43	0·02
Gunned'h	u	58	41	0·03
C'namble	–	—	—	—
Lismore..	b	68	45	0
Walcha ..	u	55	35	0
Tamw'rth	–	—	—	—
Coonab'n	–	—	—	—
P.M'cqrie	p	65	52	0·03
W'lcannia	–	—	—	—
M'rr'r'ndi	d	52	46	0·04
Taree....	–	—	—	—
Cassilis ..	–	—	—	—
M'ss'lbr'k	d	60	47	0·18
Dubbo...	o	60	40	0·02
Menindie.	g	62	39	0
Singleton	r	58	42	0·30
N'ls'n sB	r	60	50	2·70
Mudg	u	60	34	0
Ma tland.	r	75	51	0·80
Hill End.	–	—	—	—
N'wcastle	q	58	51	1·85
Orange ..	r	47	38	0·03
Bathurst	u	48	41	0·06
Forbes...	g	58	33	0
M. V'ct'ria	d	44	35	1·13
Carcoar..	u	45	43	0
Cond'b'l'n	u	49	31	0
Marsdens	u	54	44	0
Picton...	r	51	49	1·62
Sydney ..	r	55	52	4·75
Wentw'th	g	56	32	0
Young...	g	61	42	0·05
Woll'g'ng	r	—	—	—
Taralga..	r	56	22	0·35
Hay	c	61	39	0
M ss V'l	–	—	—	—
Euston		63	32	0
G'lb'rn	u	46	39	0·04
Wagga.	d	57	42	0·03
C. Geo.	r	55	48	1·31

Stations.	wt	m'x	MD	R'in
Qeaunbey'n	g	46	41	0
Deniliquin .	b	61	36	0
Moruya....	–	—	—	—
Kiandra...	s	32	24	0
Albury	u	58	41	0
Bodalla....	–	—	—	—
Cooma	g	44	35	0
Eden.....	u	54	48	0

Curve showing state of Barometer.



Fine, wind N. Cloudy, wind E. A. showers, wind S. Raining, wind W.
If it is CALM, the symbol is used without the arrow
smooth. heavy. very heavy.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 24 1885

Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·8s. *E.*

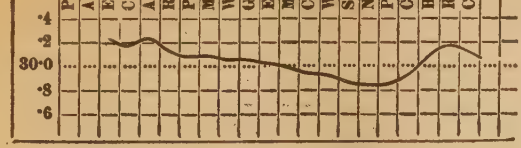
Average Annual Rainfall for 36 years .....50·243.
Average for 2. years from Jan. 1st to May 31 .....25·596.
Total Rainfall from Jan. 1st to June 24.....24·333
Barometers corrected to 32° Fa and Mean Sea Level

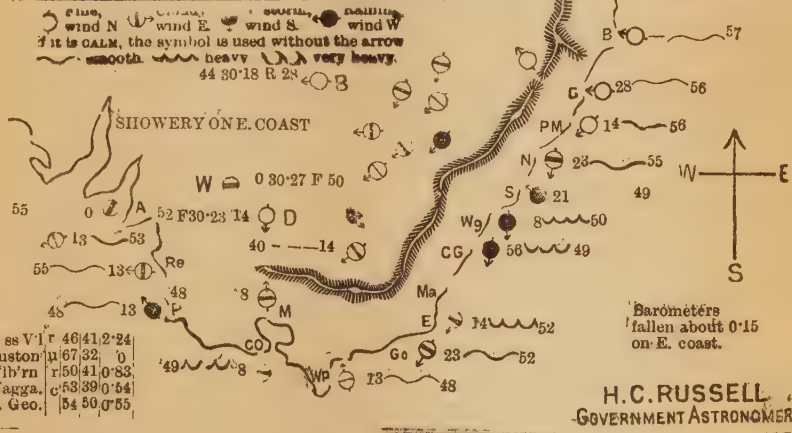
Stations.	wt	M'x	Mn	R in
Casino ...	o	74	41	0
T'nt'rfield	-	—	—	—
Clarence.	b	72	52	0
Moree....	g	66	40	0
Grafton..	b	74	51	0
Gl'n Inn's	d	48	38	0·14
Inverell..	r	55	45	0
Bourke ..	b	61	39	0
Narrabri	u	64	37	0
Armidalc	u	52	43	0·09
B'ndem'r.	p	49	44	0·23
Gunned'h	u	58	45	0·02
C'namble	-	—	—	—
Lismore..	b	71	48	0
Walcha ..	r	48	40	0·18
Tamw'rth	-	—	—	—
Coonab'n	u	59	44	0·02
P.M'cqrie	b	66	49	0·04
W'lcannia	b	—	—	0
M'rr'r'ndi	d	53	34	0·05
Taree....	c	60	55	0·31
Cassilis ..	c	53	47	1·66
M'ss'lbr'k	g	61	47	0·16
Dubbo. ...	g	58	44	0·02
Menindie.	g	60	40	0
Singleton	u	55	51	0·36
N'ls'n sB	r	60	51	3·10
Mudg	u	61	35	0
Ma tland.	r	75	56	0·73
Hill End .	u	—	—	0·31
N'wcastle	q	59	51	3·80
Orange ..	r	46	38	0·62
Bathurst	u	50	42	0·71
Forbes...	u	52	43	0·13
M.V'ct'ria	d	47	37	1·27
Carcoar..	r	48	43	0·65
Cond'b'l'n	c	45	31	0·03
Marsdens	c	55	48	0 26
Picton. ...	r	54	50	2·19
Sydney ..	r	56	50	4·85
Wentw'th	c	60	34	0
Young. ..	u	54	43	0·68
Woll'g'ng	r	58	48	1·60
Taralga..	r	59	27	1·72
Hay	u	59	35	0

Stations.	wt	M'x	Mn	R in
M ss V'l	r	46	41	2·24
Euston	µ	67	32	0
G'lb'rn	r	50	41	0·83
Wagga.	c	53	39	0·54
C. Geo.		54	50	0·55

Stations.	wt	M'x	Mn	R in
Queanbey'n	r	47	41	0·65
Deniliquin.	b	52	38	0
Moruya....	-	—	—	—
Kiandra...	r	37	30	0
Albury	f	53	40	0·12
Bodalla....	-	—	—	—
Cooma	c	46	35	1·42
Eden.....	u	57	50	0·11

Curve showing state of Barometer.





H.C. RUSSELL.
GOVERNMENT ASTRONOMER

METEOROLOGY.

9 A.M. JUNE 25 1885

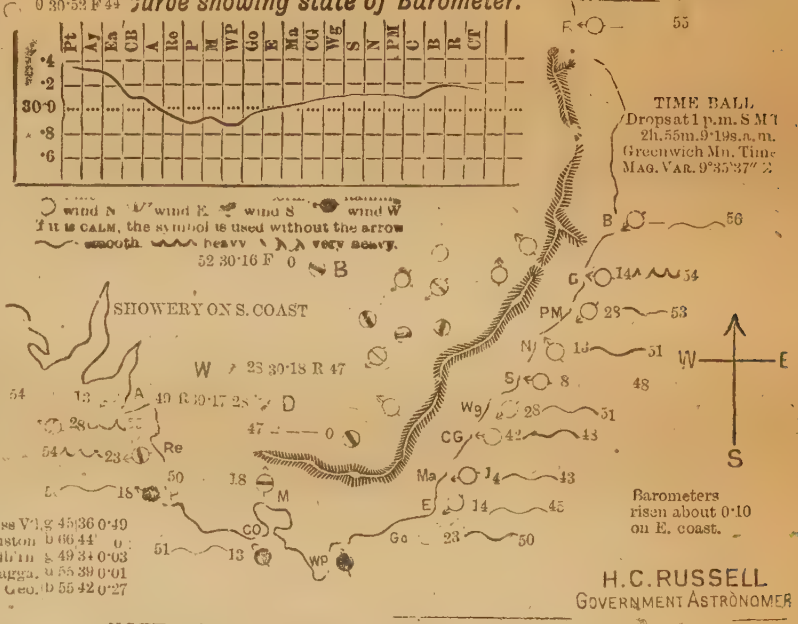
Sydney Observatory.

Lat. 33° 51′ 41″ *S.* ; *Long.* 10h. 4m. 50·81s. *E.*

Average Annual Rainfall for 26 years ....50·243.
Average for 2 years from Jan. 1st to May 31 .....25·53si.
Total Rainfall from Jan. 1st to June 25.....25·305
Barometers corrected to 32° Fa. Mean Sea Level

Stations.	Wt	M'x	M'n	R'in
Lasho...	b	67	42	0
T'nt'rfield	b	48	33	0
Clarence.	b	71	52	0
Moree....	b	56	35	0
Grafton...	c	74	51	0
Gl'n Inn's	p	42	32	0·10
Inverell..	b	54	37	0
Bourke...	u	63	43	0
Narrabri	n	60	32	0
Armidale	c	50	48	0·01
B'ndem'r.	u	50	39	0·14
Gunned'h	g	55	38	0
C'namble	u	—	—	0
Lismore..	b	68	49	0
Walcha...	c	47	35	0·22
Tamw'rth	g	50	32	0
Coonab'n	b	54	33	0
P.M'cqrie	b	64	49	0·20
W'lcannia	b	—	—	0
M'rr'r'ndi	b	50	25	0·05
Taree....	—	—	—	—
Cassilis..	c	51	42	0
M'ss'lbr'k	b	62	37	0·23
Dubbo...	g	54	33	0
Menindie.	c	63	40	0
Singleton	b	55	46	0·47
N'ls'n sB	b	75	47	1·85
Mudg	u	56	36	0
Ma tland.	b	76	52	0·89
Hill End.	c	—	—	0
N'wcastle	b	54	50	0·68
Orange..	g	43	36	0
Bathurst	u	47	39	0
Forbes...	u	56	41	0
M.V'ct'ria	b	44	33	0·22
Carcoar..	u	47	41	0
Cond'b'l'n	u	49	33	0
Marsdens	u	56	43	0
Picton...	b	53	42	0·37
Sydney..	b	54	46	0·97
Wentw'th	u	62	46	0
Young...	u	62	43	0·02
Wolf'g'ng	b	55	45	0·15
Taralga..	u	56	27	0
Hay.....		57	40	0·02

Stations.	Wt	M'x	M'n	R'in
Queanbey'n	b	51	34	0
Deniliquin.	u	51	41	0·01
Moruya....	b	75	39	0
Kiandra...	f	40	29	0
Albury....	u	53	40	0
Bodalla....	b	61	28	0
Cooma....	g	55	26	0
Eden.....	c	58	45	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; m, misty; o, overcast; p, passing showers; r, rain; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'in the rain for the previous 24 hours. The symbols used in the map are explained in the centre of it. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Ro, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; G G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding then and southerly following.

METEOROLOGICAL REPORT.—JUNE 25.

Western Australia.—Fine generally; light S.E. and E. winds and calms on west coast, and westerly winds on south coast; sea smooth. Rainfall: Perth, 0·03.

South Australia.—Generally dull inland to Peake, with rain falling in places; winds light to strong, from S.W. to N.W. Rain records inland to Quorn, heaviest on coast; Queenscliff, 0·76, and over Mount Lofty Ranges (Craigers) 1·00, to 0·10 west of Adelaide. Rain Records: Eucla, 0·01; Streaky Bay, 0·20; Cape Borda, 0·42; Adelaide, 0·47; Robe, 0·25; MacDonnell Bay, 0·40.

Victoria.—Showery round coast, with fresh N.W. wind and falling barometers; sea slight, rough at Wilson's Promontory; dull inland at Echuca, with fresh N.W. wind; hoar frost at Omeo. Rainfall: Portland, 0·39; Cape Otway, 0·02; Wilson's Promontory, 0·11.

Tasmania.—Showery and squally from N.N.W. on north coast. Rainfall at Low Heads, 0·12.

New Zealand.—Generally fine and clear; barometers, 30·20; winds, E.

Queensland.—Generally fine and clear on west coast, with light S.W. and S.E. winds, and moderate sea.

New South Wales.—Fine and clear on coast, cloudy but little or no rain inland. (Details of rainfall and weather in map above.) Moderate sea, rising barometers, and light W. and S.W. winds prevail on coast; inland the winds are either calm, or very light, from S.W. to N.W. in direction. Extra stations: Molong, calm, maximum 54°, minimum 33°, weather threatening; Cowra, calm, maximum 58°, minimum 50°, weather threatening; Balranald, S., maximum 65°, minimum 38°, weather fine; Murrumburrah, calm, maximum 49°, minimum 48°, rain 0·01, weather cloudy; Walgett, S.W., maximum 57°, minimum 40°, weather cloudy; Camden, rain 0·35, weather fine.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.W., 8, raining, temperature 50°; Cape Otway, N.W., 13, raining, moderate sea, temperature 49°; Portland, W., 28, showery, smooth sea, temperature 51°; Wilson's Promontory, W., 23, raining, moderate sea, temperature 50.

New South Wales.—Clarence River, W.N.W., 14, fine, moderate sea, temperature 68°; Newcastle, W., 28, fine, moderate sea, temperature 59; Sydney, W., 8, fine, moderate sea, temperature 57°; Cape St. George, W., 42, fine, moderate sea, temperature 58°; Moruya, N.E., 28, fine, moderate sea, temperature 58°; Dubbo, W., 8, fine, temperature 51°; Menindie, S.W., 28, dull, temperature 61°; Forbes, calm, fine, temperature 61°; Wentworth, N.W., 28, raining, temperature 48°; Goulburn, N.W., 14, dull, temperature 51°; Deniliquin, S., raining, temperature 54°; Albury, calm, raining, temperature 54°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet above summer level. Murray: At Albury, 2 feet 9 inches above summer level; at Euston, 3 feet 2 inches above summer level. Darling: At Wentworth, 2 feet above summer level; at Menindie, Wilcannia, and Bourke, low.

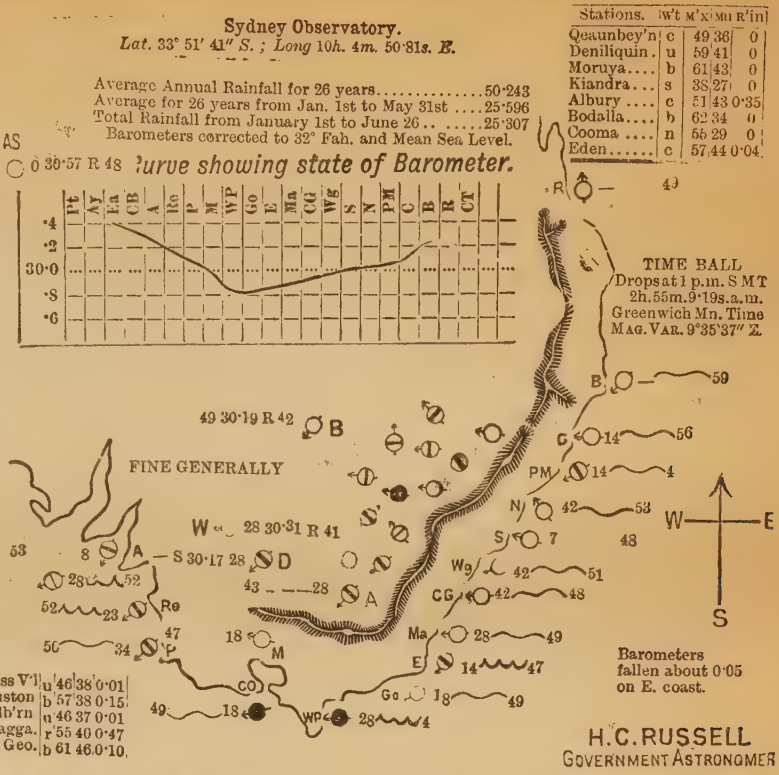
ASTRONOMICAL MEMORANDA FOR JUNE 26.

Sun rises at 7.7, sets at 4.58; Moon, 4.30 p.m., 5.20 a.m.; Mercury, 7.1 a.m., 4.43 p.m.; Venus, 8.9 a.m., 5.58 p.m.; Mars, 4.58 a.m., 2.57 p.m.; Jupiter, 10.33 a.m., 9.31 p.m.; Saturn, 6.37 a.m., 4.31 p.m. New moon, 13th; full moon, 27th.

High water at Fort Denison, June 26: 7.25 a.m., 7.46 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JUNE 26, 1885.

Stations.	wt	M'x	Mn	R in
Casino...	c	74	39	0
T'nt'rfield	c	54	34	0
Clarence.	b	72	51	0
Moree....	b	67	41	0
Grafton..	b	77	50	0
Gl'n Inn's	u	51	33	0
Inverell..	–	—	—	—
Bourke..	b	72	45	0
Narrabri	n	64	36	0
Armidale	b	50	48	0
B'ndem'r.	r	46	34	0·08
Gunned'h	b	55	40	0
C'namble	–	—	—	—
Lismore..	b	72	42	0
Walcha..	r	48	35	0·15
Tamw'rth	c	51	34	0·03
Coonab'n	b	56	32	0·04
P.M'cqrie	c	65	43	0
W'lcannia	b	—	—	0
M'rr'r'ndi	u	48	38	0·16
Taree....	c	63	42	0
Cassilis..	b	50	46	0
M'ss'lbr'k	o	60	39	0·16
Dubbo....	c	55	42	0·14
Menindie.	b	65	45	0·04
Singleton	b	58	43	0
N'ls'n sB	b	76	46	0
0 51				
Mudg	u	56	32	0·06
Ma tland.	b	75	50	0
Hill End.	u	—	—	0·15
N'wcastle	b	60	49	0
Orange..	r	43	34	0·37
Bathurst	u	47	38	0·12
Forbes....	u	55	42	0·30
M.V'ct'ria	s	44	32	0
Carcoar..	r	45	41	0·34
Cond'b'l'n	r	45	31	0·19
Marsdens	c	60	46	0 36
Picton....	b	56	38	0
Sydney..	b	58	47	0
Wentw'th	b	59	38	0·24
Young....	u	60	41	0·32
Woll'g'ng	b	59	46	0
Taralga..	u	61	31	0
Hay.....	b	81	38	0·17



Stations.	Wt	M'x	Mn	R in
Queanbey'n	c	49	36	0
Deniliquin.	u	59	41	0
Moruya....	b	61	43	0
Kiandra...	s	38	27	0
Albury	c	51	43	0·35
Bodalla....	b	62	34	0
Cooma	n	55	29	0
Eden.....	c	57	44	0·04

M ss V'l	u	46	38	0·01
Euston	b	57	38	0·15
G'lb'rn	u	46	37	0·01
Wagga.	r	55	40	0·47
C. Geo.	b	61	46	0·10

Western Australia.—Reports weather fine generally, with light northerly wind; sea smooth, no rain.

South Australia.—Weather cloudy inland, and raining on coast. Fresh south-west wind and calm generally; barometers risen about one-tenth; the sea is rough off Cape Borda and Robe. Rainfall: At Robe, 0·17; at Cape Borda, 0·02.

Victoria.—Weather cloudy, with rain generally; moderately strong westerly wind, risen barometers, and smooth sea generally except at Wilson's Promontory and Lake entrance, where it is rough. Rainfall: At Melbourne, 0·17; at Portland, 0·28; at Cape Otway, 0·43; at Wilson's Promontory, 0·85; at Lake Entrance, 0·20. At Echuca the barometer has risen to 30·03, with rather strong N.W. wind; rain measured, 0·26.

Tasmania.—At Low Heads the barometer reads 29·79; the weather is fine, with rather strong W. wind. Rainfall, 0·13.

New Zealand.—Weather gloomy and raining generally, with N.E. wind; rough sea at Russell. During the night rain fell at Russell, Gisborne, and Hokitika. Barometer reads at Russell, 29·9; at Wellington, 30·1; at Bluff, 30·0.

Queensland.—The weather is fine generally, with variable winds, and moderately smooth sea.

New South Wales.—Weather dull and threatening generally, with light rain in south and south-western division of the country; fresh and moderately strong westerly wind; barometers fallen on coast, and risen slightly inland; the sea is smooth, except at Eden. (For particulars, see map.) Extra stations: Camden Haven, S.W., maximum 62°, minimum 45°, weather cloudy; Murrumburrah, calm, maximum 45°, minimum 44°, rain 0·54, weather raining; Walgett, S.W., maximum 62°, minimum 45°, weather fine; Quirindi, S., maximum 51°, minimum 41°, weather threatening; Molong, calm, maximum 53°, minimum 36°, rain 0·24, weather overcast; Balranald, W., maximum 57°, minimum 32°, rain 0·11, weather fine; Cowra, W., maximum 57°, minimum 49°, rain 0·21, weather raining; Gundaroo, rain 0·12; Temora, S.W., rain 0·35, weather raining.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W., 13, cloudy, temperature 49°; Cape Otway, W.S.W., 18, raining, rough sea, temperature 51°; Portland, S.W., 34, cloudy, smooth sea, temperature 53°; Wilson's Promontory, W.S.W., 34, raining, rough sea, temperature 49°.

New South Wales.—Clarence River, N.W., fine, moderate sea, temperature 68°; Port Macquarie, W., 42, fine, smooth sea, temperature 63; Newcastle, W., cloudy, smooth sea, temperature 52; Sydney, W., 16, fine, smooth sea, temperature 55°; Cape St George, W., 56, fine, smooth sea, temperature 57°; Moruya, W., 28, fine, smooth sea, temperature 50°; Eden, W.S.W., 28, fine, smooth sea, temperature 57°; Dubbo, W., 28, cloudy, temperature 50°; Menindie, W., 28, fine, temperature 57°; Forbes, calm, cloudy, temperature 58°; Wentworth, W., 28, cloudy, temperature 48°; Goulburn, N.W., 14, fine, temperature 51; Deniliquin, S.W., 42, fine, temperature 61°; Albury, S.W., cloudy, temperature 50°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 2 inches above summer level; at Hay, 4 feet above summer level; at Balranald, summer level. Murray: At Albury, 2 feet 6 inches above summer level; at Euston, 3 feet 5 inches above summer level. Darling: At Wentworth, 2 feet 1 inch above summer level; at Pooncarrie, summer level; at Menindie, summer level; Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JUNE 27.

Sun rises at 7.7, sets at 4.58; Moon, 5.17 p.m., 6.10 a.m.; Mercury, 7.6 a.m., 4.46 p.m.; Venus, 8.10 a.m., 6 p.m.; Mars, 4.53 a.m., 2.55 p.m.; Jupiter, 10.30 a.m., 9.28 p.m.; Saturn, 6.33 a.m., 4.27 p.m. New moon, 13th; full moon, 27th.

High water at Fort Denison, June 27: 8·6 a.m., 8.25 p.m.

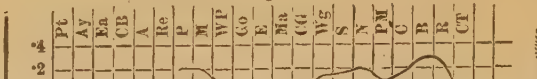
METEOROLOGICAL REPORTS AND MAP FOR JUNE 27, 1885.

Stations.	wt	M'x	Mn	R in
Casino ...	–	—	—	—
L'n'tr'field	–	—	—	—
Clarence.	b	72	46	0
Moree....	b	67	32	0
Grafton..	b	75	50	0
Gl'n Inn's	n	50	25	0
Inverell..	n	54	28	0
Bourke ..	g	62	37	0
Narrabri	n	60	35	0
Armidale	n	51	48	0
B'ndem'r.	b	48	35	0
Gunned'h	b	57	34	0
C'namble	g	—	—	0
Lismore..	c	72	41	0
Walcha...	n	46	30	0·03
Tamw'rth	b	55	30	0
Coonab'n	n	53	30	0
P.M'cqrie	b	66	38	0
W'lcannia	b	—	—	0
M'rr'r'ndi	n	53	39	0
Taree....	c	64	47	0
Cassilis ..	n	50	37	0
M'ss'lbr'k	b	62	34	0
Dubbo....	b	55	31	0
Menindie.	b	60	41	0
Singleton	b	58	45	0
N'ls'n sE	b	70	44	0
Mudg	b	57	27	0
Ma tland.	b	60	41	0
Hill End.	u	—	—	0·12
N'wcastle	b	62	41	0
Orange ..	g	42	33	0·10
Bathurst	u	43	36	0·13
Forbes...	b	56	33	0·07
M.V'ct'ria	b	41	32	0
Carcoar..	g	44	39	0·25
Cond'b'l'n	b	44	30	0
Marsdens	c	51	44	0·01
Picton....	b	53	42	0
Sydney ..	b	56	45	0
Wentw'th	b	57	37	0·01
Young....	g	57	38	0·05
Woll'g'ng	b	61	47	0
Taralga..	g	59	28	0·17
Hay.....	c	54	39	0

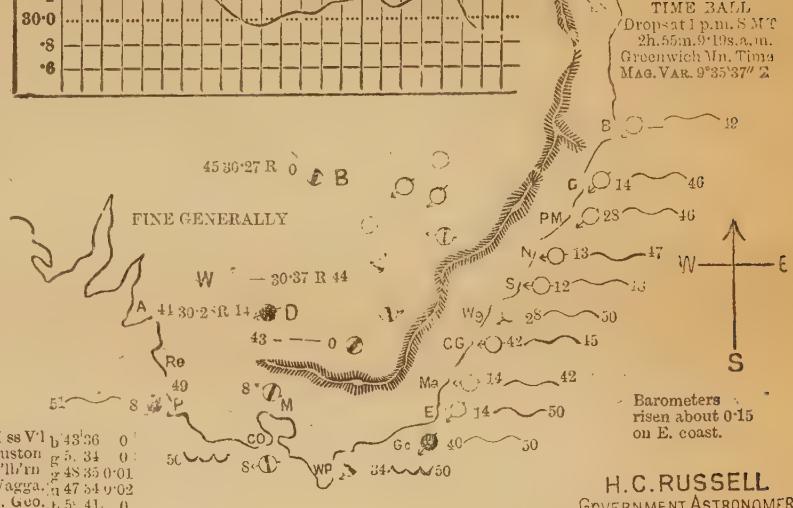
Sydney Observatory.
Lat. 33° 51′ 41″ *S.* ; *Long* 10*h.* 4*m.* 50·81*s. E.*

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to May 31st ....25·596
Total Rainfall from January 1st to June 27 .....25·307
Barometers corrected to 32° Fah. and Mean Sea Level.

Curve showing state of Barometer.



Stations.	wt	M'x	Mn	R in
Queanbey'n	c	48	32	0
Deniliquin.	r	54	42	0
Moruya....	b	62	49	0
Kiandra...	c	37	26	0
Albury	g	51	42	0
Bodalla....	g	62	25	0
Cooma	c	53	24	0
Eden.....	c	58	49	0



Victoria.—Dull and showery on coast; sea rough; wind fresh to strong, from S.W.; barometers rising; light rain falling inland at Echuca, foggy at Melbourne. Rainfall: Melbourne, 0·04; Portland, 0·64; Cape Otway, 0·09; Wilson's Promontory, 0·20; Echuca, 0·14.

Tasmania.—Fine and clear on north coast, with light S. breeze.

New Zealand.—Russell, barometer 30·00, wind S.W., fine and clear; Wellington, barometer 29·90, wind N.E., foggy; Bluff, 29·80, wind N., dull.

Queensland.—Cloudy on east coast, with light S.W. to S.E. winds and moderate sea. Fine at Brisbane; rather rough sea at Cooktown. Rainfall: Cooktown, 0·35.

New South Wales.—Generally fine and clear, with light westerly winds and calms; frosty on New England table land; dull in Riverina; raining at Deniliquin; details in map above; smooth sea; rising barometers and light W. winds on coast. Extra stations: Walgett, W.S.W., maximum 58°, minimum 33°, weather fine; Molong, calm, maximum 54°, minimum 35°, rain 0·08, weather cloudy; Murrumburrah, calm, maximum 55°, minimum 42°, rain 0·07, weather dull; Quirindi, calm, maximum 55°, minimum 38°, weather frosty; Camden Haven, S.W., maximum 60°, minimum 44°, weather fine; Balranald, W., maximum 58°, minimum 32°, weather raining; Cowra, W., maximum 58°, minimum 48°, weather threatening; Nowra, W., maximum 51°, minimum 43°, weather fine.

3 P.M. OBSERVATIONS.

New South Wales.—Clarence River, N., 10, fine, smooth sea, temperature 62°; Newcastle, N.W., 10, fine, smooth sea, temperature 57°; Sydney, W., 10, fine, smooth sea, temperature 60°; Cape St. George, W.S.W., 40, fine, smooth sea, temperature 56°; Moruya, S.W., 4, fine, smooth sea, temperature 58°; Eden, S.W., showery, smooth sea, temperature 56°; Dubbo, S.W., 28, stormy, temperature 48°; Menindie, S.W., 20, raining, temperature 56°; Forbes, W., fine, temperature 48°; Wentworth, W., 10, showery, temperature 56°; Goulburn, calm, cloudy, temperature 49; Deniliquin, W., 10, showery, temperature 46°; Albury, calm, cloudy, temperature 52°.

ASTRONOMICAL MEMORANDA FOR JUNE 29.

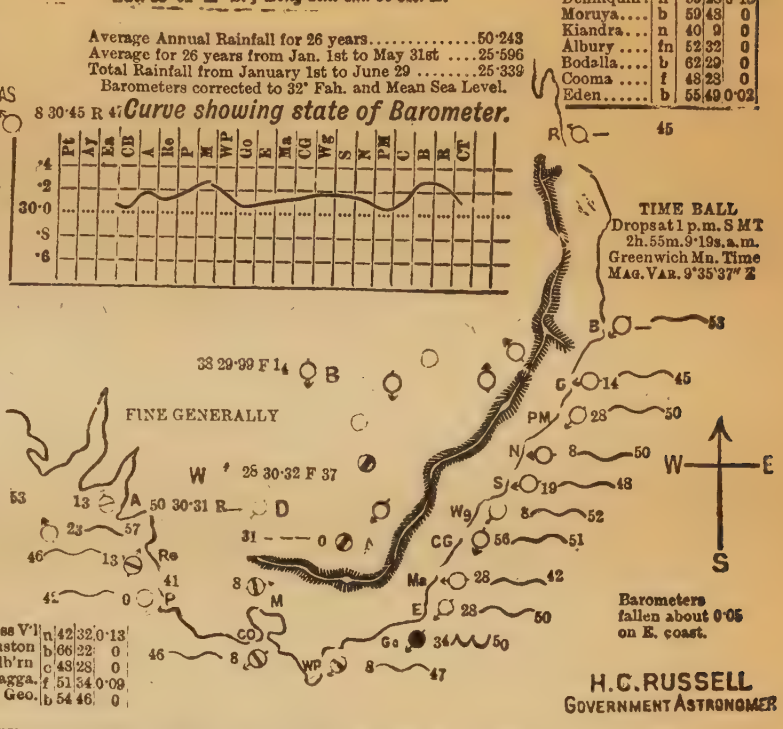
Sun rises at 7.7, sets at 4.59; Moon, 6.59 p.m., 7.41 a.m.; Mercury, 7.16 a.m., 4.56 p.m.; Venus, 8.11 a.m., 6.4 p.m.; Mars, 4.51 a.m., 2.53 p.m.; Jupiter, 10.22 a.m., 9.21 p.m.; Saturn, 6.27 a.m., 4.21 p.m. New moon, 13th; full moon, 27th.

High water at Fort Denison, June 29: 9.20 a.m., 9 38 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JUNE 29, 1885.

Stations.	wt	M'x	Mn	R'in
Casino ...	b	65	29	0
T'nt'rfield	b	58	25	0
Clarence .	b	69	41	0
Moree....	f	60	34	0·08
Grafton ..	n	57	36	0
Gl'n Inn's	n	51	26	0
Inverell..	n	55	29	0
Bourke ..	n	59	32	0
Narrabri	b	58	34	0 20
Armidalc	fn	49	45	0·07
B'ndem'r.	f	45	29	0
Gunned'h	b	55	35	0·10
C'namble	b	—	—	0
Lismore..	n	64	43	0
Walcha ..	b	47	29	0·07
Tamw'rth	n	51	29	0
Coonab'n	b	52	25	0
P.M'cqrie	b	57	42	0
W'lcannia	n	—	—	0
M'rr'r'ndi	-	—	—	—
Taree....	b	55	45	0
Cassilis ..	n	50	34	0
M'ss'lbr'k	b	60	32	0
Dubbo. ...	f	56	27	0·11
Menindie.	b	58	39	0
Singleton	b	57	42	0
N'ls'n sB	b	70	47	0
13 52				
Mudg	n	64	22	0
Ma tland.	b	71	46	0·01
Hill End .	-	—	—	—
N'wcastle	b	64	47	0
Orange ..	c	44	30	0
Bathurst	u	50	33	0
Forbes. ..	f	53	31	0·05
M.V'ct'ria	n	45	30	0·10
Carcoar..	g	45	39	0·22
Cond'b'l'n	n	37	23	0·11
Marsdens	f	55	41	0·05
Picton. ..	b	53	41	0
Sydney ..	b	54	45	0·03
Wentw'th	n	61	33	0·06
Young. ...	fc	70	30	0
Woll'g'ng	b	58	47	0
Taralga..	n	51	20	0
Hay	n	56	31	0·22

Stations.	wt	M'x	Mn	R'in
Qeaunbey'n	n	49	31	0
Deniliquin .	n	59	28	0·13
Moruya....	b	59	48	0
Kiandra...	n	40	9	0
Albury	fn	52	32	0
Bodalla....	b	62	29	0
Cooma	f	48	23	0
Eden.....	b	55	49	0·02



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; m, misty; o, overcast; p, passing showers; r, rain; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'in the rain for the previous 24 hours. The symbols used in the map are explained in the centre of it. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the num er of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; G G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them and southerly following.

Western Australia.—Esperance Bay, showery and calm, sea smooth; rainfall, 0·63.

South Australia reports weather generally fine and clear; few scattered clouds on coast and in S.E.; winds light from N.E. to N.W., and fresh in places. Rainfall: Eucla, 0·02; Streaky Bay, 0·04; Adelaide, 0·06; Robe, 0·02; Macdonnell Bay, 0·03.

Victoria.—Cloudy round coast, with light S.W. winds, falling barometers, and smooth sea; foggy at Melbourne; hoar frost at Portland, Echuca, and Omeo. Rainfall: Melbourne, 0·05; Lake Entrance, 0·22; Echuca, 0·05.

Tasmania.—Fine on north coast, with fresh cold S.E. wind; hoar frost at Low Heads.

New Zealand.—Russell, barometer 30·20, wind E.; Wellington, barometer 30·20, wind E.; Bluff, barometer 30·20, wind E. Winds light, weather generally fine, except in extreme north, where it is dull and showery.

New South Wales.—Generally fine and clear, light westerly and S. W. winds, falling barometers, and smooth sea on coast. Fine and calm inland, calm, dull, and frosty on mountains, with dense fog in places. (For details see map above.) Extra stations: Cowra, calm, maximum 57°, minimum 48°, weather dull; Murrumburrah, calm, maximum 62°, minimum 42°, weather dull; Bairanald, calm, maximum 61°, minimum 26°, rain 0·29, weather foggy; Quirindi, calm, maximum 52°, minimum 37°, weather frosty; Molong, calm, maximum 53°, minimum 33°, rain 0·04, weather dull; Camden Haven, 8., maximum 58°, minimum 44°, weather fine; Walgett, S.W., maximum 55°, minimum 34°, rain 0·06, weather frosty; Temora, rain 0·04, weather foggy; Pooncarie, rain 0·28.

Queensland.—Fine and clear with light S.E. and S.W. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, E.N.E., 8, cloudy, temperature 50°; Cape Otway, calm, cloudy, smooth sea, temperature 52°; Portland, N., 18, fine, smooth sea, temperature 54°; Wilson's Promontory, W.S.W., 13, cloudy, smooth sea, temperature 51°.

New South Wales.—Menindie, calm, fine, temperature 56°; Wentworth, S., 14, fine, temperature 47°; Deniliquin, S., fine, temperature 60°; Albury, W., fine, temperature 48°; Eden, S.W., 56, fine, smooth sea, temperature 54°; Moruya, S.S.W., 28, fine, moderate sea, temperature 59°; Cape George, S.S.W., 28, fine, moderate sea, temperature 57°; Sydney, W., 5, fine, smooth sea, temperature 57°; Newcastle, S., 14, fine, smooth sea, temperature 62°; Port Macquarie, S.S.W., 28, fine, smooth sea, temperature 63°; Clarence River, S.W., 14, fine, moderate sea, temperature 64°; Forbes, calm, cloudy, temperature 49°; Goulburn, W., fine, temperature 48°; Dubbo, N.W., 14, fine, temperature 49°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 2 inches above summer level; at Balranald, 2 inches below summer level. Murray: At Albury, 2 feet 10 inches above summer level; at Euston, 4 feet 3 inches above summer level. Darling: At Wentworth, 2 feet 9 inches above summer level; at Pooncarie, summer level; at Menindie, summer level.

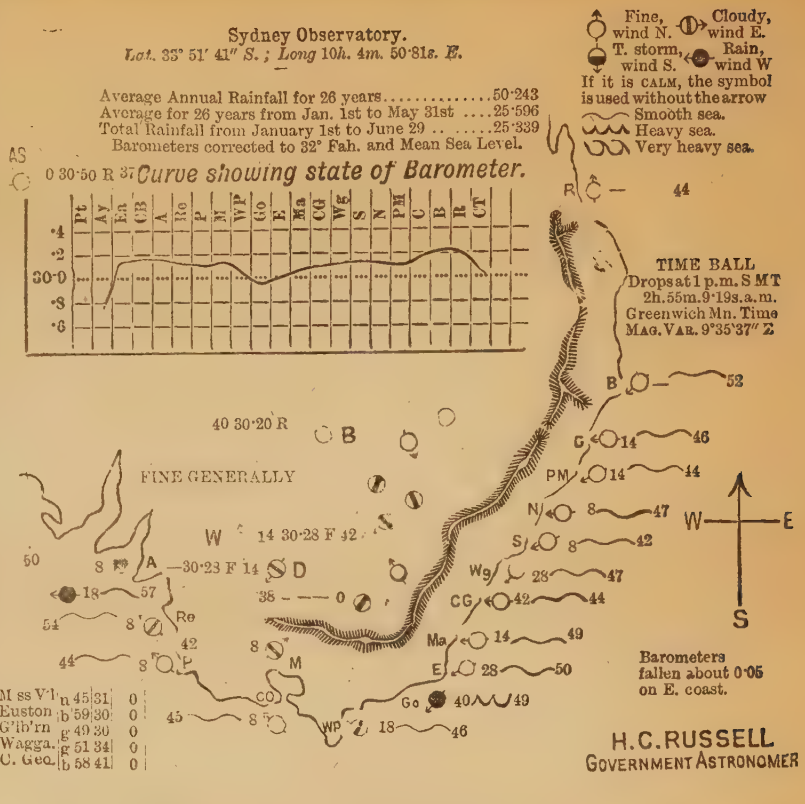
ASTRONOMICAL MEMORANDA FOR JUNE 30.

Sun rises at 7.7, sets at 5; Moon, rises at 7.50 p.m., sets at 8.22 a.m.; Mercury, 7.16 a.m., 4.56 p.m.; Venus, 8.11 a.m., 6.4 p.m.; Mars, 4.51 a.m., 2.53 p.m.; Jupiter, 10.22 a.m., 9.21 p.m.; Saturn, 6.27 a.m., 4.21 p.m. New moon, 13th; full moon, 27th.

High water at Fort Denison, June 30: 9.56 a.m., 10.13 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JUNE 30, 1885.

Stations	wt	MX	Mn	R'in
Casino...	-	—	—	—
T'nt'rfield	n	56	26	0
Clarence.	b	68	45	0
Moree....	b	65	30	0
Grafton..	b	75	39	0
Gl'n Inn's	n	55	25	0
Inverell..	b	56	27	0
Bourke..	b	64	31	0
Narrabri	b	60	35	0
Armidale	n	49	45	0
B'ndem'r.	n	46	26	0
Gunned'h	-	—	—	—
C'namble	b	—	—	0
Lismore..	-	—	—	—
Walcha..	n	59	24	0
Tamw'rth	b	54	26	0
Coonab'n	n	60	21	0
P.M'cqrie	b	63	38	0
W'lcannia	c	—	—	0
M'rr'r'ndi	b	51	36	0
Taree....	c	63	32	0
Cassilis ..	n	50	31	0
M'ss'lbr'k	b	60	30	0
Dubbo. ..	g	58	26	0
Meniudie.	b	61	39	0
Singleton	b	58	43	0
N'ls'n sR	c	73	41	0
18 49				
Mudg	n	62	24	0
Ma tland.	b	60	41	0
Hill End.	u	—	—	0
N'wcastle	b	64	41	0
Orange ..	n	44	28	0
Bathurst	u	51	40	0
Forbes...	u	—	32	0
M.V'ct'ria	n	47	27	0
Carcoar..	g	45	39	0
Cond'b'l'n	u	43	25	0
Marsdens	u	50	41	0
Picton...	c	56	32	0
Sydney..	c	57	41	0
Wentw'th	c	64	36	0
Young...	u	59	38	0
Woll'g'ng	c	62	50	0
Taralga..	n	61	26	0
Hay.....	c	58	35	0



H.C.RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; m, misty; o, overcast; p, passing showers; r, rain; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained in the centre of it. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; G G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Albany, cloudy and dull, with light W. wind and smooth sea. No rain.

South Australia.—Generally scattered clouds south of Clare, light rain falling in places on and near coast, winds light from N.E. to N.W. and calm, smooth and moderate sea and steady barometers on coast. Rainfall—Streaky Bay, 0·10, and still falling; Cape Borda, 0·06, showery; Adelaide, 0·04, raining lightly; and Robe, 0·04.

Victoria.—Generally fine and frosty; smooth sea, light N.W. and N.E. winds and falling barometers on coast; hoar frost last night at Melbourne, Cape Otway, and Omeo; heavy dew last night at Wilson's Promontory, rough sea at Lake Entrance. No rain. W.N.W. and cloudy at Echuca.

Tasmania.—Fine on N. coast, with fresh S.S.E. wind; hoar frost last night at Low Heads.

New Zealand.—Russell, barometer 29·50, wind N., squally and showery; Wellington, barometer 29·80, wind S.E., dull and showery; Bluff, barometer, 29.90, wind calm, foggy.

New South Wales.—Generally fine and clear, cloudy on mountains west of Sydney. Frosty on high lands generally. Smooth sea, falling barometers, and light westerly winds on coast. Calm inland. Details in map above. Extra stations: Cowra, wind calm, maximum 57°, minimum 47°, weather dull; Balranald, wind W., maximum 69°, minimum 29°, weather fine; Molong, wind calm, maximum 42°, minimum 38°, weather cloudy; Camden Haven, wind S.W., maximum 67., minimum 38°, weather fine; Walgett, wind calm, maximum 55°, minimum 28°, weather fine; Quirindi, wind calm, maximum 57°, minimum 34°, weather frosty.

Queensland.—Fine and clear, with light S.W. to S.E. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers falling.—Melbourne: Wind N.W., weather fine, temperature 57°; Cape Otway, wind calm, weather cloudy, moderate sea, temperature 57°; Portland, wind N.N.W. 18, weather fine, sea smooth, temperature 58°; Wilson's Promontory, wind W.N.W. 12, weather cloudy, sea smooth, temperature 52°.

New South Wales.—Menindie, wind calm, weather fine, temperature 57°; Wentworth, wind N.W. 14, weather fine, temperature 51°; Deniliquin, wind N.W. 14, weather fine, temperature 54°; Albury, wind S.W., weather threatening, temperature 50°; Eden, wind W.S.W. 56, weather fine, sea smooth, temperature 55°; Moruya, wind W., weather fine, sea smooth, temperature 62°; Cape George, wind W.S.W. 42, fine, sea smooth, temperature 53°; Sydney, wind W. 12, weather fine, sea smooth, temperature 55°; Newcastle, wind N.W. 14, weather fine, sea smooth, temperature 57°; Port Macquarie, wind E.S.E. 14, weather fine, sea smooth, temperature 63°; Clarence River, wind W. 10, weather fine, temperature 65°; Forbes, wind calm, weather fine, temperature 50°; Goulburn, wind N.W. 14, weather fine, temperature 48°; Dubbo, wind S.W. 14, weather fine, temperature 46°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 2 inches above summer level; at Balranald, 1 inch above summer level. Murray: At Albury, 2 feet 10 inches above summer level; at Euston, 3 feet 2 inches above summer level. Darling: At Wentworth, 2 feet 10 inches above summer level; at Pooncarie, summer level; at Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 1.

Sun rises at 7.7, sets at 5; Moon, 8.44 p.m., 9.2 a.m.; Mercury, 7.27 a.m., 5.7 p.m.; Venus, 8.13 a.m., 7.7 p.m.; Mars, 4.50 a.m., 2.50 p.m.; Jupiter, 10.15 a.m., 9.15 p.m.; Saturn, 6.20 a.m., 4.14 p.m. New Moon, 12th. Full Moon, 27th.

High water at Fort Denison, 10.30 a.m., 10.47 p.m.

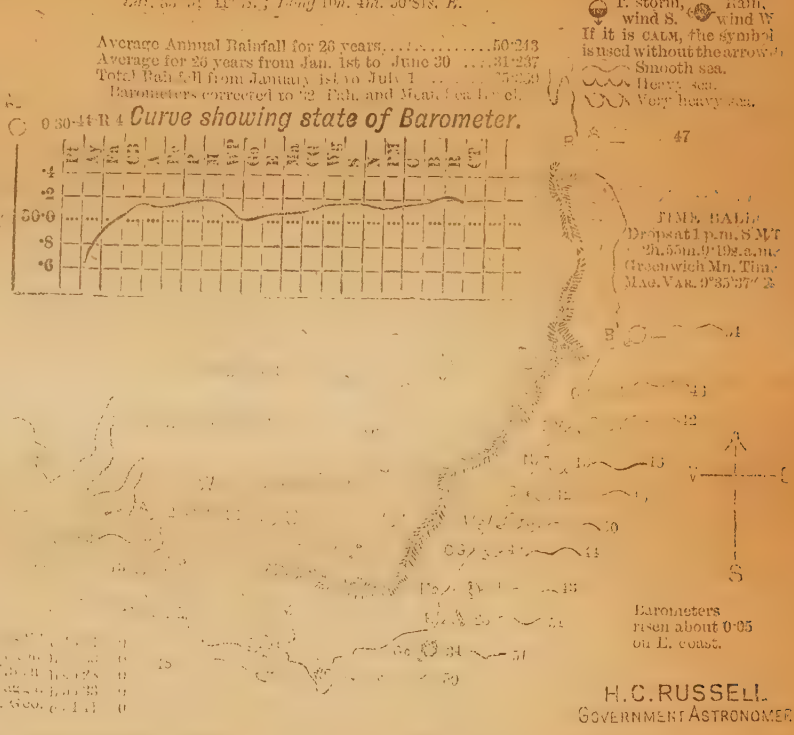
METEOROLOGICAL REPORTS AND MAP FOR JULY 1, 1885.

Stations	wt	Mx	Mn	R'in
Casino ...	b	72	27	0
T'nt'rfield	–	—	—	—
Clarence..	b	68	50	0
Morec....	b	66	30	0
Grafton..	n	76	33	0
Gl'n Imr's	n	54	21	0
Invercll..	b	55	25	0
Bourke ..	b	60	32	0
Narrabri	b	60	35	0
Armidale	n	49	46	0
B'ndear.	–	—	—	—
Gunned'h	b	54	36	0
C'namble	b	–	–	0
Lismore..	b	71	30	0
Walcha ..	n	47	27	0
Tamw'rth	b	54	24	0
Coonab'n	n	54	23	0
P.M'cquric	b	64	28	0
W'lcannia	b	–	–	0
M'rr'r'ndi	n	49	30	0
Tares....	–			
Cascills ..	b	10	31	
M'ss'ibr'k	n	57	29	0
Bubbo...	b	[illegible]	[illegible]	
Menindie.	[illegible]	[illegible]	[illegible]	
Sturgeton	b	[illegible]	[illegible]	
N'ck'n H	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
N'weastle	b	[illegible]	[illegible]	
Orange ..	[illegible]	[illegible]	[illegible]	0
Bathurst.	b	[illegible]	[illegible]	
Sydney..	b	[illegible]	[illegible]	
M. V'ct'ria	[illegible]	[illegible]	[illegible]	
Cooma...	[illegible]	[illegible]	[illegible]	
Cond'b'n	[illegible]	[illegible]	[illegible]	
Wagga...	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
Sydney..	b	[illegible]	[illegible]	
Wentwth	c	[illegible]	[illegible]	
[illegible]	c	[illegible]	[illegible]	
Wolf'ng	b	61	[illegible]	0
Laraldga..	n	51	[illegible]	0
Hay	c	59	37	0

Sydney Observatory.

Lat. 33° 51′ 41″ S.; Long 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 1 .....[illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL,
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column [illegible] of the weather at 9 a.m., b st[illegible] clouds; d, drizzling rain; f. fog; [illegible] coast; p, passing showers; r, [illegible] The next column, M'x gives the maximum temperature for the previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained in the centre of it. At each coast station the wind symbol is p[illegible] which the wind is [illegible] weather; a circle [illegible] raining. Next to [illegible] number of miles the wind is blowing per hour; next a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometric curve shows the [illegible] barometers round the coast from Perth to Cooktown: [illegible] Perth; Av, Albany; Eu, Eucla; CB, Cape Borda; A, Adelaide; Ro, Rooke; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, M[illegible]; C G, Jervis Bay; W, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C C, Cape River; B, B[illegible]; [illegible] [illegible] [illegible]

METEOROLOGICAL REPORTS AND MAP FOR JULY 2, 1885.

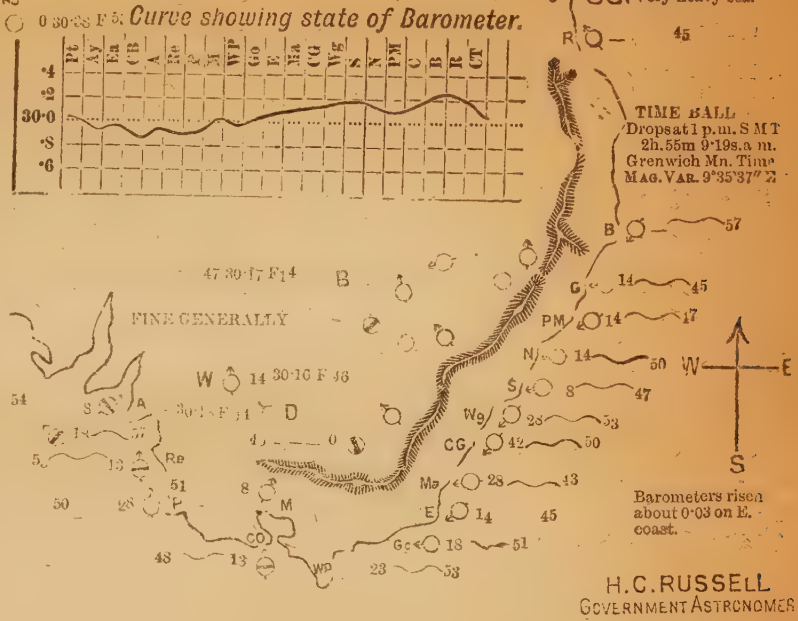
Stations	W.T.	Max.	Min.	Rain
Albany	[illegible]	[illegible]	[illegible]	[illegible]
Geraldton	u	[illegible]	[illegible]	0
Balranald	b	79	43	0
Bathurst	n	50	27	0
Bend'meer	n	41	22	0
Bodalla	b	67	30	0
Bourke	b	67	38	0
C'md'n Hn	b	59	36	0
C. St. Geo.	c	58	31	0
Carcoar	n	45	25	0
Casino	b	70	37	0
Cassilis	n	49	41	0
Clarence	b	68	42	0
Condob'lin	u	48	25	0
Cooma	n	52	23	0
Coonab'n.	u	54	21	0
Coonamble	—	—	—	—
Cowra	g	58	48	0
Deniliquin	c	65	37	0
Dubbo	o	56	29	0
Eden	b	58	44	0
Euston	g	75	43	0
Forbes	b	—	36	0
Glen Innes	n	52	21	0
Goulburn	f	50	28	0
Grafton	a	73	41	0
Gunnedah	b	54	31	0
Hay	b	59	41	0
Hill End	n	—	—	0
Inverell	b	55	25	0
Kiamba	b	38	14	0
Lismore	b	6[illegible]	2[illegible]	0
Maitland	b	58	40	0
Marsdens	c	56	40	0
Menindie	c	67	41	0
Molong	n	53	32	0
Moree	b	63	30	0
Moruya	b	54	44	0
Moss Vale	u	47	33	0
M. Victoria	n	45	32	0
Mudgee	n	66	19	0
Murrumbh	b	62	38	0
Murr'r'ndi.	n	47	31	0
Mus'lbro.	k b	56	30	0
Narrabri	b	70	36	0
Nelson's B.	b	75	44	0
Newcastle	b	59	43	0
Nowra	—	—	—	—
Orange	n	44	30	0
Picton	n	58	38	0
P.M'quarie	b	61	31	0
Qu'nbeyan	n	43	28	0
Quirindi	n	55	35	0
Singleton	b	56	41	0
SYDNEY	b	59	45	0
Tamworth	b	54	24	0
Taralga	n	57	21	0
Taree	b	61	40	0
T'nt'rfield	n	53	23	0
Wagga	g	55	37	0
Walcha	n	45	22	0
Walgett	b	57	31	0
Wentw'rth	c	68	39	0
Wilcannia	—	—	—	—
Woll'ng'ng	b	62	47	0
Young	c	72	33	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 2 .. ..25·339
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; m, misty; o, overcast; p, passing showers; r, rain; t, thunder; u, threatening. The next column, Max, gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained in the centre of it. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; Cn, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, P. Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; G G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve catches one at a glance to trace the depressions, [illegible] in W[illegible] Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Weather very unsettled; fine and clear at Carnarvon, Albany, Geraldton, and Esperance Bay; and passing showers with S.W. wind at Perth; thunder-showers in night at Esperance Bay. Rainfall: Perth, 0·19; Esperance Bay, 0·66.

South Australia reports weather fine but cloudy south of Strangway Springs, gloomy and threatening in parts; N. to N.W. winds generally, force 23 to 34 miles. Rainfall: Eucla, 0·35; Cape Borda, 0·03; and Adelaide, 0·01.

Victoria.—Generally fine, smooth sea, light to fresh northerly winds, and falling barometers on coast. N.E. wind and fine inland at Echuca. Rainfall: Melbourne, 0·02; Portland, 0·01; Cape Otway, 0·01; Echuca, 0·15.

Tasmania.—Foggy on N. coast, with light S.E. wind. Rainfall: Low Heads, 0·41.

New Zealand.—General height of barometer, 30·10, winds calm or light from E.; weather fine and clear.

New South Wales.—Generally fine, clear, and frosty, with light N.W. and W. winds and calms; smooth sea, slowly falling barometers, and light west winds on coast; dull on western slopes of mountains. Details in map above.

Queensland.—Generally fine and clear with light S.W. to S.E. winds and calms; sea moderate. No rain.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, wind N.N.W., 42, weather threatening, temperature 61°; Wentworth, wind N., 8, weather threatening, temperature 56°; Deniliquin, wind calm, weather fine, temperature 54°; Albury, wind calm, weather cloudy, temperature 54°; Eden, wind N.E., 14, weather fine, sea smooth, temperature 55°; Moruya, wind N.E., 28, weather fine, sea moderate, temperature 61°; Cape-George, wind S., 28, weather fine, sea smooth, temperature 64°; Sydney, wind S., 7, weather fine, sea smooth, temperature 58°; Newcastle, wind W., 14, weather fine, sea smooth, temperature 62°; Port Macquarie, wind S.S.W., 28, weather fine, sea smooth, temperature 63°; Forbes, wind calm, weather cloudy, temperature 56°; Goulburn, wind calm, weather fine, temperature 52°; Dubbo, wind N.W., 14, weather cloudy, temperature 57°.

Victoria.—Melbourne, wind N.N.E., weather cloudy, temperature 56°; Cape Otway, wind N., 8, weather fine, sea smooth, temperature 57°; Portland, wind N.N.W., 23, weather fine, sea smooth, temperature 56°; Wilson's Promontory, wind N.N.W., 13, weather fine, sea smooth, temperature 57°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 1 inch above summer level; at Hay, 5 feet 4 inches above summer level. Murray: At Albury, 2 feet 9 inches above summer level; at Euston, 5 feet 10 inches above summer level. Darling: At Wentworth, 3 feet 3 inches above summer level; at Pooncarie, low; at Menindie, summer level.

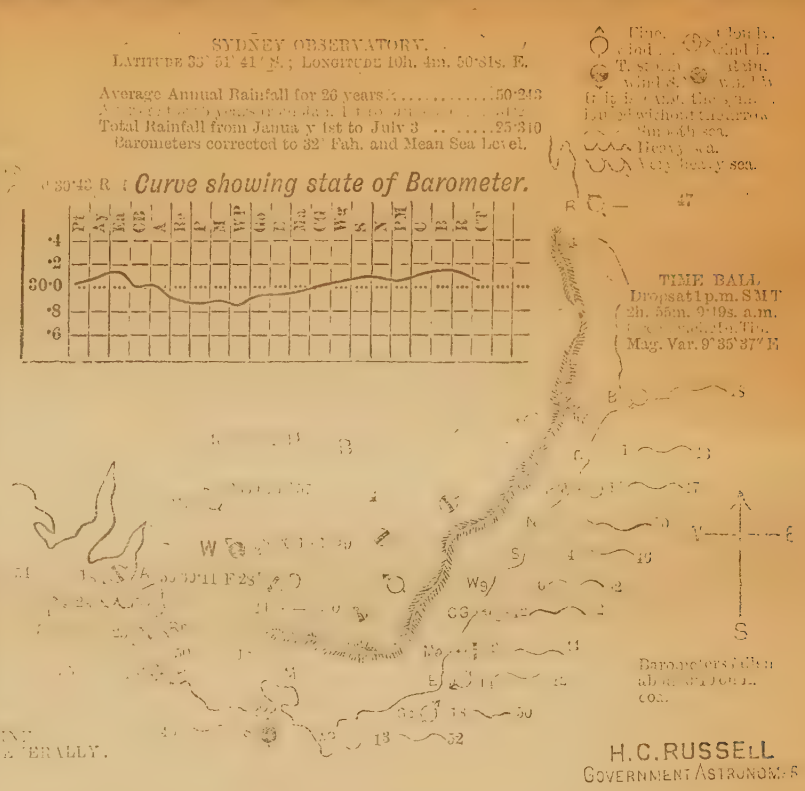
ASTRONOMICAL MEMORANDA FOR JULY 3.

Sun rises at 7.7, sets at 5.1; Moon, 10.34 p.m., 10.12 a.m.; Mercury, 7.35 a.m., 5.19 p.m.; Venus, 8.14 a.m., 6.11 p.m.; Mars, 4.48 a.m., 2.48 p.m.; Jupiter, 10.8 a.m., 9.9 p.m.; Saturn, 6.14 a.m., 4.8 p.m. New moon 12th, full moon 27th.

High water at Fort Denison, July 3: 11.39 a.m., 11.58 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 3, 1883.

Stations	W.T.	M'n	Rain
Albury	u	57 40	0·01
Armidale	n	48 45	0
Balranald	b	65 36	0
Bathurst	b	52 29	0
Bend'meer	n	48 22	0
Bodalla	c	63 25	0
Bourke	b	69 38	0
Camd'n H.	b	60 45	0
C. St. Geo.	b	63 42	0
Carcoar	b	47 37	0
Casino	b	71 45	0
Cassilis	n	50 32	0
Clarence	b	68 42	0
Condob'lin	g	50 31	0
Cooma	c	51 26	0
Cootam'ra	b	69 23	0
Cowra	b	[illegible]	0
Deniliquin	u	64 [illegible]	[illegible]
Dubbo	[illegible]	62 28	0
Eden	b	53 40	0
Euston	g	62 43	0
Forbes	g	[illegible]	0
Glen Innes	n	51 2[illegible]	[illegible]
Goulburn	[illegible]	[illegible]	[illegible]
Grafton	n	[illegible]	[illegible]
Grenfell	b	54	
Gunnedah	b	[illegible]	0
Hay	c	[illegible]	0
Hill End	b	[illegible]	[illegible]
Inverell	b	[illegible]	0
Kempsey	g	63 2[illegible]	0
Lismore	b	70 [illegible]	0
Maitland	b	[illegible]	0
Marsdens	n	[illegible]	0
Menindee	g	[illegible]	0
Molong	b	[illegible]	0
Moree	b	[illegible]	0
Moruya	[illegible]	[illegible]	0
Moss Vale	[illegible]	[illegible]	0
M. Victoria	b	[illegible]	0
Narrandera	n	65 29	0
Murrumbidgee	c	55 30	0
Narrandi	b	56 35	0
Mudgee	b	59 33	0
Nevertire	b	62 [illegible]	0
P. Stephens	b	70 42	0
Newcastle	b	63 44	0
Nowra	b	55 40	0
Orange	b	48 30	0
Picton	n	58 34	0
P. M'quarie	b	63 42	0
Qu'nbeyan	n	46 31	0
Quirindi	n	57 34	0
Singleton	b	57 59	0
SYDNEY	c	59 44	0
Tamworth	c	55 27	0
Taralga	n	63 28	0
Taree	b	62 38	0
Tenterfield	n	57 22	0
Wagga	b	53 40	0·14
Walcha	c	48 21	0
Walgett	b	58 36	0
Wentw'rth	p	60 45	0·01
Wilcannia	c	—	0
Woll'ngong	b	65 45	0
Young	u	67 34	0



NOTES EXPLANATORY OF MAP.

[illegible] the column headed W.T. gives the state of the weather at 9 [illegible] sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; [illegible] passing showers; r, rain; t, thunder; u, threatening. The [illegible] the maximum temperature for previous 24 hours. M'n the [illegible] temperature; [illegible] rain for the previous 24 hours. The [illegible] exhibited in the centre of it. At each coast station the wind symbol [illegible] like a vane pointing to the direction from which the wind is [illegible]. A circle with it means fine weather; a circle with bar, cloudy [illegible]; and a black spot, raining. Next to this symbol are placed figures denoting [illegible] the wind is moving per hour; next, a symbol showing the state [illegible] figures denoting the shade temperature at 9 a.m. The barometer [illegible] barometers round the coast from Perth to Cooktown:—Pt, [illegible], Cape Borda; A, Adelaide; Rc, Robe; P, Portland; [illegible] Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; G G, [illegible]; N, Newcastle; P M, Port Macquarie; C, [illegible] Bay; R, Rockhampton; Ct, Cooktown. Inland the state of [illegible] at Albury, Deniliquin, Wentworth, Bourke, and Alice [illegible] curve enables one at a glance to trace the depressions, [illegible] Australia and passing along eastwards; northerly winds preced- [illegible] the wave.

Western Australia. Cloudy, [illegible] variable winds, and smooth sea. Rainfall: Perth, 0·42; [illegible].

South Australia.—Generally cloudy [illegible] inland to Beltana; N.W. to S.W. winds prevail. Rain recorded inland to Beltana, heaviest over Mount Lofty Ranges, and near coast; 0·20 to 0·30 measured N. of Adelaide, moderate sea, rising barometer, and S.W. winds on coast. Rainfall: Eucla, 0·01; Streaky Bay, 0·14; Cape Borda, 0·13; Adelaide, 0·70; Robe, 0·41; M'Donnell Bay, 0·98.

Victoria.—Showery on [illegible] barometer, sea moderate. Rainfall: Melbourne, 0·02; Cape Otway, 0·10; Wilson's Promontory, 0·01; Lake Entrance, 0·01; Omeo, 0·02.

Tasmania.—Dull on N. coast, with fresh N.N.W. wind. Rain: 0·05.

New Zealand.—Weather generally fine and clear. Barometers, 30·10; wind calm or light from east.

New South Wales.—Generally fine and clear; still cloudy in places on western slopes of mountains; frosty on highlands generally; smooth sea, falling barometer, and light W. winds on coast; calm inland. Temperature [illegible] 62; no rainfall.

Queensland.—Generally fine and clear with light S.W. to S.E. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

New South Wales.—Menindee, wind W.S.W., 42, weather cloudy, temperature 60°; Wentworth, wind W., 12, weather threatening, temperature 51°; Deniliquin, wind calm, weather [illegible] temperature [illegible]; Albury, [illegible] 55°; Eden, wind N.E., 14, weather fine, sea smooth, temperature 25°; Moruya, wind N.E., 28, weather fine, sea smooth, temperature 62°; Cape George, wind W., 28, weather fine, sea smooth, temperature 63°; Sydney, wind W., 8, weather fine, sea smooth, temperature 58°; Newcastle, wind W., 14, weather fine, sea smooth, temperature 60°; Port Macquarie, wind S.S.W., 14, weather fine, sea smooth, temperature 64°; Clarence River, wind E., weather fine, sea smooth, temperature 63°; Goulburn, wind N.W., 14, weather fine, temperature 52°; Dubbo, wind N.W., weather fine, temperature 49°.

Victoria.—Melbourne, wind N., 13, raining, temperature [illegible]; [illegible] Otway, wind W.N.W., 13, raining, sea rough, temperature 52°; Portland, wind S.W., 34, weather fine, sea smooth, temperature 55°; Wilson's Promontory, raining, sea moderate, temperature 50°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 1 inch above summer level; at Hay, 4 feet 11 inches above summer level; at Balranald, 6 feet 5 inches above summer level. Murray: At Albury, 2 feet 6 inches above summer level; at Euston, 6 feet 4 inches above summer level. Darling: At Wentworth, 3 feet 7 inches above summer level; at Pooncarie, low; at Menindee, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 4.

Sun rises at 7.7, sets at 5.1; Moon, 11.30 p.m., 10.46 a.m.; Mercury, 7.39 a.m., 5.25 p.m.; Venus, 8.14 a.m., 6.13 p.m.; Mars, 1.18 a.m., 2.46 p.m.; Jupiter, 10.5 a.m., 9.6 p.m.; Saturn, 8.10 a.m., 4.4 p.m. New moon 12th, full moon 27th.

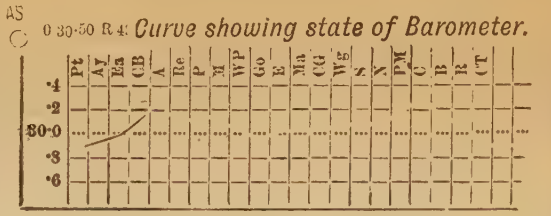
High water at Fort Denison, July 4: 6 a.m., 12.17 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 4, 1885

Stations	W.T.	Mx	Mn	R'in
Albury ..	f	52	43	0·22
Armidale	u	47	44	0
Balranald	b	58	32	0·11
Bathurst..	g	56	33	0
Bend'meer	u	49	29	0
Bodalla ..	c	63	31	0
Bourke ..	b	68	39	0
Camd'n H.	c	60	41	0
C. St. Geo.	c	67	50	0
Carcoar ..	g	48	38	0
Casino ..	b	69	30	0
Cassilis .	c	52	35	0
Clarence ..	c	68	42	0
Condob'lin	u	48	35	0
Cooma	c	56	34	0
Coonab'n.	c	62	32	0·03
Coonamble	b	—	—	0
Cowra	c	51	47	0
Deniliquin	b	59	35	0·25
Dubbo ..	b	61	37	0·02
Eden	c	58	42	0
Euston ..	f	60	30	0·12
Forbes	u	—	43	0
Glen Innes	c	55	23	0
Goulburn	g	55	32	0
Grafton ..	c	74	36	0
Gunnedah	b	55	36	0
Hay	b	65	36	0·13
Hill End	c	—	—	0
Inverell ..	n	55	25	0
Kiandra ..	c	39	30	0
Lismore ..	b	70	30	0
Maitland ..	c	66	42	0
Marsdens	d	57	47	0·03
Menindie	b	60	37	0·02
Molong ..	g	53	37	0
Moree	b	69	38	0
Moruya ..	c	65	49	0
Moss Vale	g	49	38	0
M. Victoria	b	48	35	0
Mudgee ..	c	65	25	0
Murrumbh	g	62	45	0
Murr'r'ndi.	g	54	36	0
Mus'lbrook	c	60	36	0
Narrabri ..	b	66	37	0
Newcastle	c	73	41	0
Nowra	b	64	49	0
Orange ..	g	47	32	0
Picton	b	60	37	0
P.M'quarie	g	62	42	0
P.Stephens	c	73	41	0
Qu'nbeyan	n	48	32	0
Quirindi ..	g	60	40	0
Singleton	u	58	42	0
SYDNEY ..	b	60	47	0
Tamworth	b	58	31	0
Taralga ..	u	56	25	0
Taree	—	—	—	—
T'nt'rfield	u	55	26	0
Wagga....	b	55	43	0·22
Walcha ..	c	48	20	0·01
Walgett ..	b	59	37	0
Wentw'rth	b	60	34	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	65	49	0
Young ..	u	63	40	0·01

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·31s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 4 .. ..25·340
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and showery on W. coast, fine S. at Esperance Bay; wind N.W. to S.W. Rainfall—Esperance Bay, 0·02; Perth, 0·30; Albany, W., threatening rain, rough sea; rain 0·03.

South Australia reports weather generally fine inland, dull S. and S.E. of Adelaide and on coast; light variable winds and calms, smooth sea, rising barometer, and westerly winds on S. coast. Rainfall—Robe, 0·01; and M'Donnell Bay, 0·01.

Victoria.—Cloudy and foggy round coast, with light S.W. to W. winds and calms; fine and clear inland at Echuca, wind W.N.W; Omeo fine, wind S.W. Rainfall—Melbourne, 0.10; Portland, 0·03; Cape Otway, 0·14; Wilson's Promontory, 0·27; Echuca, 3rd July 0·09, 4th July 0·32; and Omeo, 0·04.

Tasmania—Foggy on N. coast, wind light from S.S.E. Rainfall—Low Heads, 0·17.

New Zealand.—Weather generally fine, barometer 30·20, winds easterly and light. Passing showers at Russell and Gisborne.

Queensland.—Fine and clear; light S.W. and W. winds and calm; sea moderate; no rain.

New South Wales.—Weather generally fine and clear, cloudy in places (vide map); smooth sea, light S.W. and W. winds and steady barometer on coast; drizzling rain at Marsdens; calm inland, foggy at places.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, S.W., 6, misty, moderate, temperature 55°; Portland, N.W., 18, fine, smooth sea, temperature 55°; Wilson's Promontory, W., 18, cloudy, moderate sea, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 11 inch above summer level; at Balranald, 7 feet 8 inches above summer level. Murray: At Albury, 2 feet 7 inches above summer level; at Euston, 6 feet 10 inches above summer level. Darling: At Wentworth, 3 feet 10 inches above summer level; at Pooncarie, low; at Menindie, summer level.

ASTRONOMICAL MEMORANDA FOR JULY 6.

Sun rises at 7.7, sets at 5.2; Moon, 12.27 p.m., 11.57 a.m.; Mercury, 7.47 a.m., 5.37 p.m.; Venus, 8.15 a.m., 6.17 p.m.; Mars, 4.46 a.m., 2.44 p.m.; Jupiter, 9.58 a.m., 9 p.m.; Saturn, 6.4 a.m., 3.56 p.m. New moon 12th, full moon 27th.

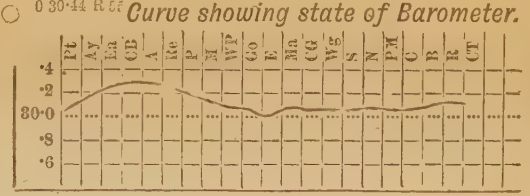
High water at Fort Denison, July 6: 1.24 a.m., 1.49 p.m.

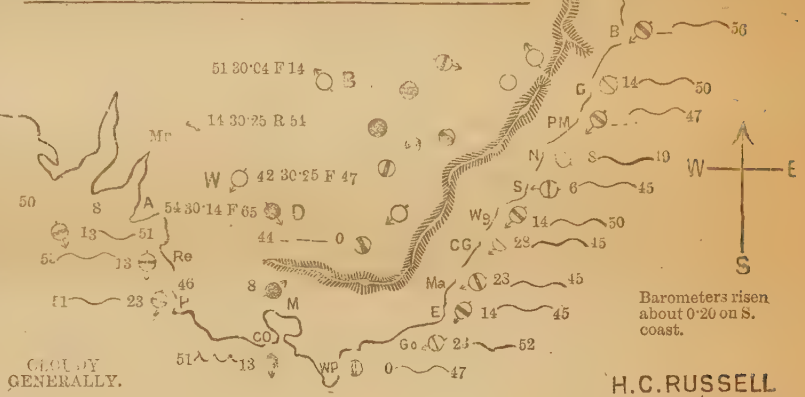
METEOROLOGICAL REPORTS AND MAP FOR JULY 6, 1885.

Stations	W.T.	Mx	Mn	r'n
Albury ..	u	58	35	0·11
Armidale	b	49	44	0
Bahranald	–	—	—	—
Bathurst ..	u	53	34	0
Bend'meer	n	49	31	0
Bodalla ..	g	64	25	0
Bourke ..	b	64	40	0·06
Camd'n H.	–	—	—	—
C. St. Geo.	g	59	41	0
Carcoar ..	g	47	38	0
Casino ..	b	77	29	0
Cassilis .	g	50	36	0
Clarence ..	c	68	47	0
Condob'lin	p	47	26	0·07
Cooma	n	54	25	0
Coonab'n.	d	59	35	0·07
Coonamble	–	—	—	—
Cowra	c	57	46	0
Deniliquin	p	66	34	0·50
Dubbo ..	g	66	40	0·06
Eden	c	57	41	0
Euston ..	c	50	46	0·37
Forbes	u	—	33	0·06
Glen Innes	c	52	32	0
Goulburn	b	51	28	0
Grafton ..	b	74	50	0
Gunnedah	g	58	35	0
Hay	r	58	36	0
Hill End	u	—	—	0
Inverell ..	u	55	25	0
Kiandra ..	g	40	21	0
Lismore ..	b	68	37	0
Maitland ..	c	59	39	0
Marsdens	d	57	33	0·07
Menindie	u	58	49	0·05
Molon ..	–	—	—	—
Moree	d	64	40	0
Moruya ..	g	61	—	0
Moss Vale	g	46	33	0
M. Victoria	g	49	29	0
Mudgee ..	c	62	24	0
Murrumbh	c	62	40	0
Murr'n ndi.	o	51	33	0
Mus'lbrook	c	65	30	0
Narrabri ..	g	68	49	0·03
Newcastle	c	63	43	0
Nowra	g	59	39	0
Orange ...	g	39	35	0
Picton	c	56	34	0
P.M'quarie	g	63	43	0
P.Stephens	c	71	42	0
Qu'nbeyan	n	50	31	0
Quirindi ..	c	60	35	0
Singleton	b	61	44	0
SYDNEY ..	b	57	43	0·01
Tamworth	c	56	31	0
Taralga ..	u	68	25	0
Taree	b	64	41	0
T'nt'rfield	n	56	24	0
Wagga....	u	56	31	0·03
Walcha ..	c	50	31	0
Walgett ..	g	57	42	0
Wentw'rth	c	55	45	0·15
Wilcannia	g	—	—	0
Woll'ng'ng	c	62	40	0
Young .	u	65	2	0·05

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·31s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years, from Jan. 1st to June 30 ....31·257
Total Rainfall from January 1st to July 6 .. ..25·349
Barometers corrected to 32° Fah. and Mean Sea Level.





H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fair; g for blue sky; c, detached clouds; d. drizzling rain; f, fog; g. gloomy; h, hazy; m. misty; n, frosty; o. overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy, with light W. and N.W. winds, smooth sea, and steady barometers. Rainfall—Geraldton, 0·85; Carnarvon, 0·08; Perth, 0·32, and showery; Esperance Bay, 0·02.

South Australia reports weather generally fine, with scattered clouds; winds S.W. and S., force 13 to 24 miles per hour. Rain recorded inland to Beltana, heaviest over Mount Lofty Ranges, 0·50 to 0·85; Crafers, 1·10, and 0·50 to 0·85 in S.E.; Beachport, 1·02; 0·20 to 0·50 north of Adelaide. Moderate sea, rising barometers, and southerly winds on coast. Rainfall—M'Donnell Bay, 0·57; Port Augusta, 0·06; Eucla, 0·05; Streaky Bay, 0·23; Cape Borda, 0·37; Adelaide, 0·68; and Robe, 0·58.

Victoria.—Cloudy, showery round coast, sea smooth (rough at Cape Otway), barometers rising, winds light and variable; dull, with fresh N.N.E. wind, at Echuca; calm and dull at Omeo. Rainfall—Melbourne, 0.38; Portland, 0·22; Cape Otway, 0·38; Wilson's Promontory, 0·91; Echuca, 0·50.

Tasmania—Dull on N. coast, with fresh S.E. wind. Rain—Low Heads, 0·08.

New Zealand.—Russell, bar., 29·60, wind S.W., strong, showery, sea rough; Wellington, bar. 30·10, wind E., dull; Bluff, bar. 30·20, wind N.E., showery.

New South Wales.—Generally cloudy, with light rain recorded in places; clouds light and scattered on coast, with steady barometer; smooth sea, and light westerly winds; calm and dull inland. For details see map above. Temora reports rain 0·15, and still falling, at 9 a.m.

Queensland.—Cloudy and dull on east coast; but no rain falling, or recorded; sea moderate and smooth.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, wind W. 6, weather fine, barometers rising, temperature 50°; Cape Otway, wind S., 12, weather misty, sea rough, temperature 54°; Portland, wind S., 24, weather fine, sea smooth, temperature 53°; Wilson's Promontory, wind N.E., 6, weather cloudy, sea smooth, temperature 53°.

New South Wales.—Deniliquin, wind S.W., raining, temperature 58°; Albury, wind W., weather cloudy, temperature 52°; Eden, wind S.W., 14, weather cloudy, sea smooth, temperature 56; Moruya, wind S., 42, raining, sea moderate, temperature 55°; weather fine, sea smooth, temperature 61°; Clarence River, wind S.W., 14, weather fine, sea smooth, temperature 65°; Goulburn, calm, weather cloudy, temperature 52°; Dubbo, stormy, weather cloudy, temperature 50°.

ASTRONOMICAL MEMORANDA FOR JULY 7.

Sun rises at 7.7 a.m., sets at 5.3 p.m.; Moon, rises 1.27 a.m., sets at 12.35 p.m.; Mercury rises at 7.52 a.m., sets at 5.44 p.m.; Venus rises at 8.16 a.m., sets at 6.18 p.m.; Mars rises at 4.46 a.m., sets at 2.42 p.m.; Jupiter rises at 9.54 a.m., sets at 8.56 p.m.; Saturn rises at 6 a.m., sets at 3.54 p.m. New Moon, 12th; Full Moon, 27th.

High water at Fort Denison, 2.23 a.m., 2.56 p.m.

METEOROLOGICAL ABSTRACT, JUNE 1885, with results for same month during the preceding 26 years.

—	Barometer at 32° Fah. and mn. sea lev'l.	Temperature in Shade.			Rainfall.	
		Mean Max.	Mean Min.	Mean.	Amount Inches.	No. of days.
June, 1885 ...	30·107	60·0	48·8	54·4	16·296	16
Average for 27 years ...	30·091	60·7	47·9	54·3	5·597	11·6
Monthly Extremes:						
Highest ...	30·285 1877.	62·9 1873.	52·6 1873.	57·8 1873.	16·296 1885.	19 1863.
Lowest ...	29·924 1872.	57·7 1878.	44·7 1859.	51·3 1878.	0·541 1877.	4 1883.

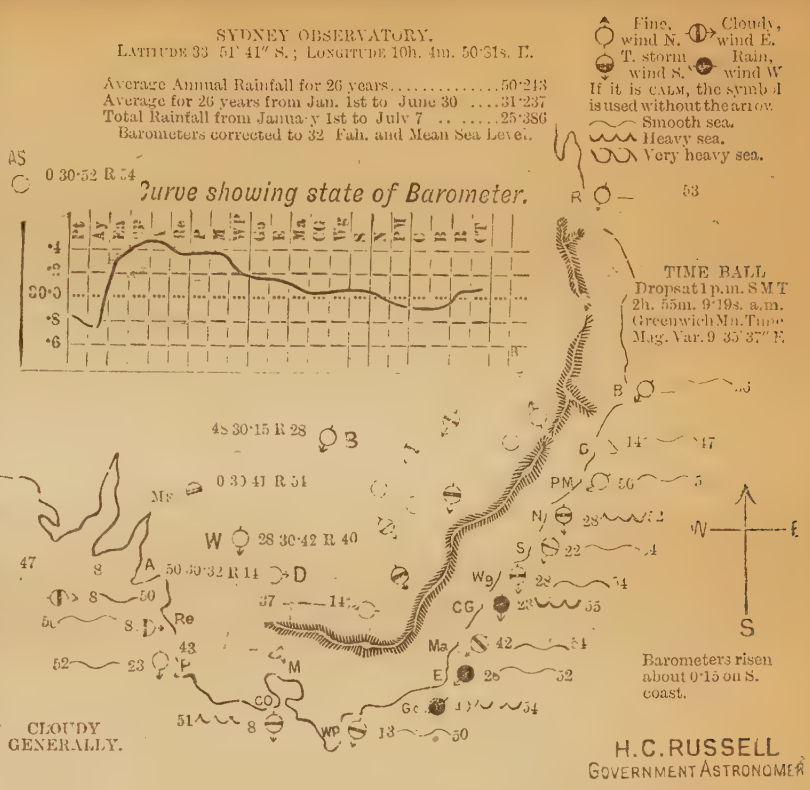
Wind.—June, 1885.—Prevailing direction, W.; prevailing direction for same month during preceding 26 years, W.; June, 1885—mean miles per hour, 11·3.

Temperature.—June, 1885.—Highest maximum temperature, 69·7 on 1st; highest maximum in any June since 1859, 71·7 (June 24, 1872); June, 1885—lowest minimum temperature, 40·6, on 30th; lowest minimum in any June since 1859, 38·1 (June 29, 1862).

Rainfall.—June, 1885.—Greatest fall in one day, 4·845, on 24th;

METEOROLOGICAL REPORTS AND MAP FOR JULY 7, 1885.

Stations	w.	Mx	Mn	R'in
Albury ..	b	57	35	0
Armidale	u	47	46	0
Balranald	b	52	33	0·01
Bathurst..	g	48	37	0
Bend'meer	b	—	34	0
Bodalla ..	g	57	36	0
Bourke ..	b	60	44	0
Camd'n H.	–	—	—	—
C. St. Geo.	p	54	42	0·27
Carcoar ..	b	46	39	0
Casino ..	b	70	33	0
Cassilis ..	b	41	37	0
Clarence ..	g	69	45	0
Condob'lin	b	55	25	0·31
Cooma....	b	52	28	0
Coonab'n.	b	49	28	0·06
Coonamble	–	—	-	—
Cowra	n	58	50	0
Deniliquin	b	93	33	0
Dubbo ..	f	53	31	0·03
Eden	p	57	41	0·05
Euston ..	b	57	38	0
Forbes....	b	—	34	0
Glen Innes	c	55	24	0
Goulburn	b	52	31	0
Grafton ..	c	70	62	0
Gunnedah	c	53	38	0·09
Hay	b	49	31	0·11
Hill End	b	—	—	0
Inverell ..	c	55	25	0
Kiandra ..	n	36	25	0
Lismore ..	–	—	—	—
Maitland..	c	55	44	0
Marsdens	b	51	41	0·05
Menindie	c	57	44	0
Molong ..	b	44	36	0
Moree	c	59	32	0
Moruya ..	c	57	50	0
Moss Vale	u	46	36	0·06
M. Victoria	u	—	—	0
Mudgee ..	n	50	22	0
Murrumbh	f	58	25	0
Murr'r'ndi.	u	48	38	0
Mus'lbrook	g	49	39	0
Narrabri..	u	66	37	0·03
Newcastle	q	60	49	0·23
Nowra	u	58	42	0
Orange ..	c	46	34	0·02
Picton	c	56	39	0·03
P.M'quarie	b	63	49	0
P.Stephens	r	70	43	0·54
Qu'nbeyan	c	49	36	0
Quirindi ..	u	60	36	0
Singleton	g	55	45	0
SYDNEY ..	g	56	45	0·04
Tamworth	c	53	33	0
Taralga ..	u	59	27	0
Taree	g	61	45	0·67
T'nt'rfield	f	72	27	0
Wagga....	f	53	29	0
Walcha ..	r	46	34	0
Walgett ..	u	56	41	0
Wentw'rth	b	57	37	0
Wilcannia	–	—	—	—
Woll'ng ng	c	61	47	0·25
Young ..	b	68	30	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fair or fine day; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; rin the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Mendindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy generally, with light northerly winds, smooth sea, and falling barometers. Rainfall—Perth, 0·34; Carnarvon, 0·16; Geraldton, 0·45, and still falling.

South Australia reports weather generally fine, scattered clouds on coast, and over Mount Lofty Ranges; winds light from S.E. to N.E.; sea smooth, barometers rising; no rain.

Victoria.—Fine but cloudy and misty on coast, sea smooth, barometers rising, winds southerly, foggy at Melbourne and Omeo; sea rather rough at Cape Otway. Rainfall—Lake Entrance, 0·02; Cape Otway, 0·07. Fresh S.S.E. wind and fine inland at Echuca.

Tasmania—Fine and clear on N. coast, fresh S.S.E. breeze.

New Zealand.—Russell, bar. 29·80, wind squally with rain; Wellington, bar. 29·80, wind S.E., dull and showery; Bluff, bar. 29·20, wind N.E., fine and clear.

New South Wales.—Cloudy and threatening on coast and high lands; fine and cool inland, from Condobolin and on the Victorian border; rising sea, with strong southerly winds and rain falling in places on coast. Details in map.

Queensland.—Fine and clear on east coast, with light S.W. winds and smooth sea. No rain.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, wind S., weather fine, temperature 51°; Wentworth, wind S., weather fine, temperature 51°; Deniliquin, wind S.W., weather fine, temperature 58°; Albury, wind calm, weather fine, temperature 52°; Eden, wind S.W., 23, weather showery, sea smooth, temperature 54°; Moruya, wind S., 42, showery, sea moderate, temperature 59°; Cape George, wind S., 56, raining, sea heavy, temperature 56°; Sydney, wind S.S.W., 25, weather cloudy, sea moderate, temperature 56°; Newcastle, wind S., 42, weather stormy, sea rising, temperature 59°; Port Macquarie, wind S.S.W., 56, weather cloudy, sea rising, temperature 61°; Clarence River, wind S.S.W., 72, weather threatening, sea rising, temperature 65°; Forbes, wind calm, weather fine, temperature 50°; Goulburn, wind S.E., weather cloudy, temperature 54°.

Victoria.—Melbourne, wind S.W., 13, weather fine, barometers falling, temperature 52°; Cape Otway, wind S., 6, weather cloudy, misty, sea rough, temperature 54°; Portland, wind S.E., 24, weather showery, sea smooth, temperature 55°; Wilson's Promontory, wind S.S.W., 13, weather cloudy, sea smooth, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 10 inches above summer level; at Hay, 4 feet above summer level; at Balranald, 8 feet above summer level. Murray: At Albury, 2 feet above summer level; at Euston, 8 feet 4 inches above summer level. Darling: At Wentworth, 5 feet 3 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 8.

Sun rises at 7.6, sets at 5.3; Moon, 2.31 a.m., 1.17 p.m.; Mercury, 7.55 a.m., 5.49 p.m.; Venus, 8.16 a.m., 6.20 p.m.; Mars, 4.45 a.m., 2.41 p.m.; Jupiter, 9.51 a.m., 8.53 p.m.; Saturn, 5.57 a.m., 3.51 p.m. New Moon, 12th; full moon, 27th.

High water at Fort Denison, July 8: 3.35 a.m., 4.14 p.m.

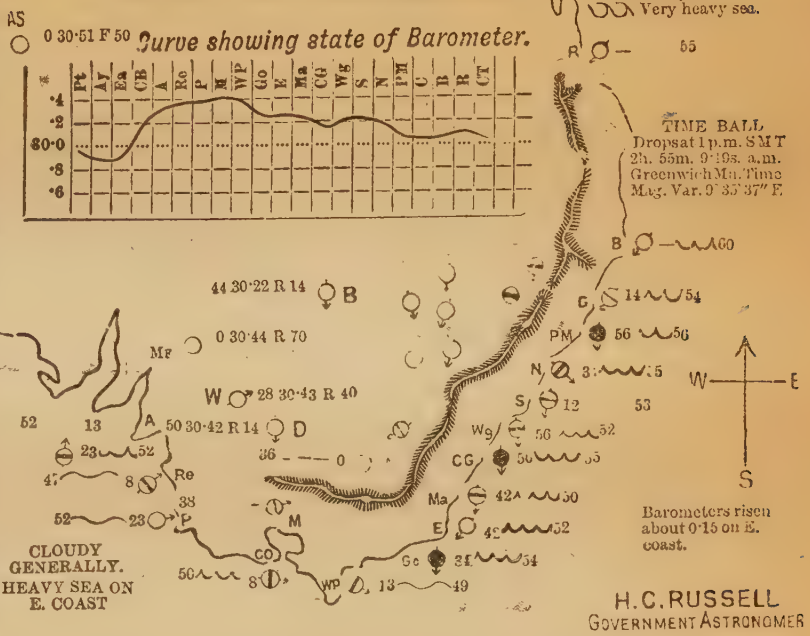
Stations	wt	Mx	Mn	R'in
Albury ..	n	61	34	0
Armidale	u	49	46	0
Balranald	b	63	30	0
Bathurst..	g	52	44	0
Bend'meer	c	48	32	0
Bodalla ..	c	63	49	0
Bourke ..	b	62	38	0
Camd'n H.	-	—	—	—
C. St. Geo.	p	66	56	0·57
Carcoar ..	g	47	41	0
Casino .. :	g	70	49	0
Cassilis ..	u	52	39	0
Clarence ..	u	69	45	0·14
Condob'lin	b	34	26	0
Cooma....	p	49	38	0·10
Coonab'n.	b	55	41	0
Coonamble	h	—	—	0
Cowra	g	58	41	0
Deniliquin	b	59	34	0
Dubbo ..	b	60	31	0
Eden	c	56	49	0·25
Euston ..	b	64	35	0
Forbes....	b	—	35	0
Glen Innes	c	50	21	0
Goulburn	g	53	36	0
Grafton ..	u	71	62	0
Gunnedah	c	59	40	0
Hay	b	55	36	0
Hill End	b	—	—	0
Inverell ..	b	55	24	0
Kiandra ..	g	39	19	0
Lismore ..	c	68	59	0
Maitland..	p	—	50	0·45
Marsdens	n	58	42	0
Menindie	b	55	40	0
Molong ..	-	—	—	—
Moree	b	66	58	0
Moruya ..	c	66	58	0·03
Moss Vale	r	62	50	0·57
M. Victoria	p	47	38	0·15
Mudgee ..	g	36	25	0
Murrumbh	b	63	33	0
Murr'r'ndi.	p	53	46	0·15
Mus'lbrook	u	61	39	0
Narrabri ..	c	68	38	0
Newcastle	q	65	46	1·62
Nowra....	-	—	—	—
Orange ..	c	49	38	0
Picton	g	58	50	0·02
P.M'quarie	p	62	52	0·81
P.Stephens	c	70	50	1·15
Qu'nbeyan	g	51	41	0
Quirindi ..	u	54	43	0
Singleton	u	58	53	0·03
SYDNEY ..	g	56	52	0·67
Tamworth	b	54	40	0
Taralga ..	b	62	32	0
Taree	g	61	44	1·08
T'nt'rfield	u	55	36	0
Wagga....	b	58	29	0
Walcha ..	c	47	34	0·05
Walgett ..	b	60	40	0
Wentw'rth	c	60	18	0
Wilcannia	b	—	—	0
Woll'ng'ng	c	60	50	0·47
Young..	n	78	33	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 8 .. ..26·055
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b tanding for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and showery with fresh S.W. to N.W. winds and smooth sea. Rainfall — Carnarvon, 1·54; Geraldton, 0·79; Perth, 0·45; Albany, 0·39; Esperance Bay, 0·23.

South Australia reports weather generally fine, with scattered clouds; winds light to fresh, from N. to N.E.; sea rough at Cape Borda; barometers falling; no rain.

Victoria.—Generally cloudy and unsettled; light E. winds, steady barometer, and rough sea on coast. Hoar frost in night at Echuca; light rain falling at Omeo; foggy at Melbourne. Rainfall—Portland, 0·01; Cape Otway, 0·07; Lake Entrance, 0·10, and falling lightly; Omeo, 0·03.

Tasmania—Fine and clear; fresh S.E. wind.

New Zealand.—Russell, bar. 29·90, wind N., fine; Wellington, bar. 29·90, wind calm, showery, rain 0·44; Bluff, bar. 30·10, wind E., light.

New South Wales.—Generally cloudy on coast and mountains; light rain falling on coast, with heavy sea and strong southerly winds (see weather map and temperature list above); fine inland west of the mountains, with light airs and calms. Laurieton, S.W., max. 62, min. 41; rain, 1·07; raining, sea rising.

Queensland.—Fine and clear, with light S.W. winds on east coast, no rain; rough sea at Cape Moreton.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, wind calm, weather cloudy, temperature 55°; Wentworth, wind calm, weather fine, temperature 52°; Deniliquin, wind calm, weather fine, temperature 51°; Albury, wind calm, weather fine, temperature 54°; Eden, wind S.S.W., 28, weather dull, sea heavy, temperature 55; Moruya, wind S., 42, weather showery, sea heavy, temperature 56°; Sydney, wind W.S.W., 28, weather fine, sea heavy, temperature 56°; Newcastle, wind S.S.E., fresh, weather showery, sea moderating, temperature 60°; Port Macquarie, wind S., weather squally, sea heavy, temperature 61°; Clarence River, wind S., weather dull, sea high, temperature 64°; Forbes, wind S., weather fine, temperature 52°; Goulburn, wind S.E., weather dull, temperature 85°; Dubbo, wind S.E., 14, weather fine, temperature 54°.

Victoria.—Melbourne, wind N.E., temperature 47°; Cape Otway, wind E.N.E., 8, weather fine, sea rough, temperature 52°; Portland, wind E.N.E., 18, weather fine, sea smooth, temperature 56°; Wilson's Promontory, E., 18, weather cloudy, sea moderate, temperature 52°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 11 inches above summer level; at Hay, 4 feet above summer level; at Balranald, 6 feet 10 inches above summer level. Murray: At Albury, 2 feet above summer level; at Euston, 8 feet 8 inches above summer level. Darling: At Wentworth, 5 feet 3 inches above summer level; at Pooncarie, Menindie, and Wilcannia, low.

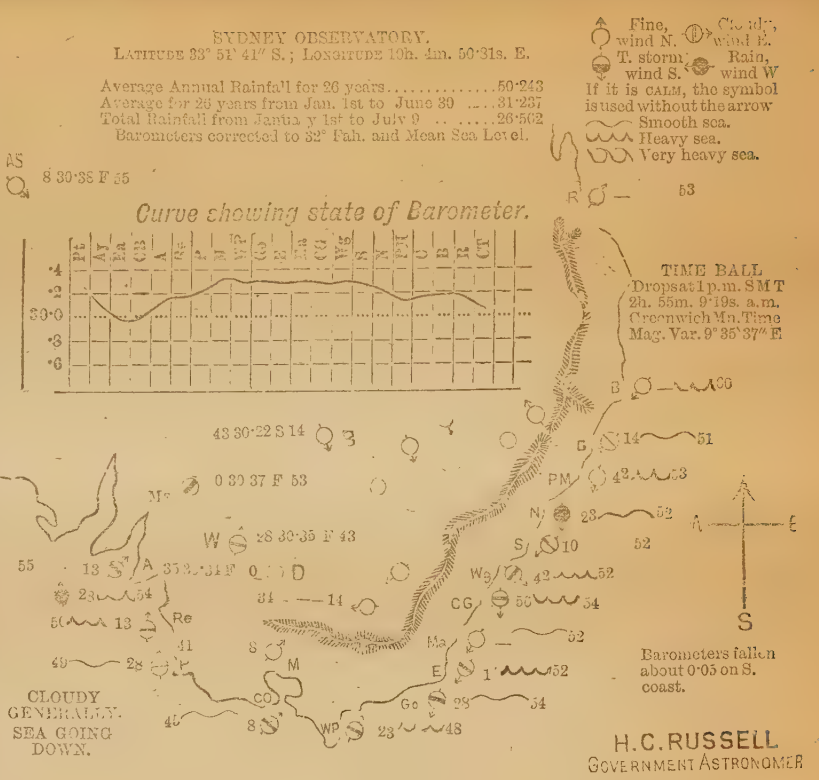
ASTRONOMICAL MEMORANDA FOR JULY 9.

Sun rises at 7.6, sets at 5.4; Moon, 3.35 a.m., 2.5 p.m.; Mercury, 7.58 a.m., 5.54 p.m.; Venus, 8.16 a.m., 6.22 p.m.; Mars, 4.44 a.m., 2.40 p.m.; Jupiter, 9.47 a.m., 8.50 p.m.; Saturn, 5.53 a.m., 3.47 p.m. New Moon, 12th; full moon, 27th.

High water at Fort Denison, July 9: 4.52 a.m., 5.34 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 9, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	b	63	33	0
Armidale	b	50	48	0
Balranald	b	75	32	0
Bathurst..	b	53	29	0
Bend'meer	b	50	33	0
Bodalla ..	b	62	42	0
Bourke ..	b	64	37	0
Camd'n H.	–	—	—	—
C. St. Geo.	c	66	47	0·18
Carcoar ..	b	48	34	0
Casino .. :	b	68	33	0
Cassilis .	b	54	35	0
Clarence ..	c	66	47	0
Condob'lin	n	42	25	0
Cooma	n	53	24	0
Coonab'n.	b	59	25	0
Coonamble	–	—	—	--
Cowra	b	58	49	0
Deniliquin	b	63	33	0
Dubbo ..	b	62	29	0
Eden	u	57	47	0·01
Euston ..	b	70	35	0
Forbes....	b	—	32	0
Glen Innes	b	54	32	0
Goulburn	b	51	27	0
Grafton ..	b	68	61	0
Gunnedah	b	59	39	0
Hay	b	61	36	0
Hill End	n	—	—	0
Inverell ..	b	59	25	0
Kiandra ..	b	37	21	0
Lismore ..	b	66	55	0
Maitland..	p	—	47	0·03
Marsdens	b	60	38	0
Menindie	g	[illegible]	[illegible]	0
Molong ..	b	61	34	0
Moree	b	73	38	0
Moruya ..	b	60	49	0
Moss Vale	b	45	37	0·06
M. Victoria	b	45	34	0·05
Mudgee ..	b	69	21	0
Murrumbh	b	60	33	0
Murr'r'ndi.	u	52	45	0·07
Mus'lbrook	b	63	35	0·06
Narrabri ..	b	69	36	0
Newcastle	p	61	48	0·39
Nowra	c	58	48	0·04
Orange ..	b	50	31	0
Picton	b	58	46	0
P.M'quarie	b	62	49	0·62
P.Stephens	r	68	49	2·53
Qu'nbeyan	p	53	33	0
Quirindi ..	g	61	47	0
Singleton	g	58	45	0·02
SYDNEY ..	u	57	48	0·51
Tamworth	b	58	40	0
Taralga ..	b	54	27	0·15
Taree	c	62	49	0 22
T'nt'rfield	n	59	26	0
Wagga....	b	59	29	0
Walcha ..	c	47	34	0
Walgett ..	b	62	30	0
Wentw'rth	c	65	37	0
Wilcannia	g	—	—	0
Woll'ng'ng	b	63	37	0·24
Young ..	n	70	32	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fanning for b ne sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is [illegible] with [illegible] weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine on West coast, with light N.E. and S.E. winds and calms. Rainfall—Geraldton, 0·46; Perth, 0·14, dull on S. coast with west wind, rain; Esperance Bay, 0·46.

South Australia.—Weather generally dull inland to Beltana, and scattered clouds to Charlotte Waters; winds N.E. to N.W., force 23 to 34 miles per hour; rough sea; falling barometers and light northerly winds on South coast. Rainfall—Eucla, 0·26; Cape Borda, 0·12.

Victoria.—Cloudy round coast, with light N.E. wind, moderate sea and falling barometers; fine at Melbourne and Omeo, hoar frost in night at Echuca, Cape Otway, and Melbourne: wind, S.W., inland. Rainfall—Lake Entrance, 0·02.

Tasmania.—Dull on North coast. Fresh S.S.E. wind at Low Heads.

New Zealand.—Russell, bar. 29·90, wind calm, fine, and clear; Wellington, bar. 30·00, wind S.E., light rain, rainfall 0·46; Bluff, bar. 30·20, wind S.E., fine and clear.

New South Wales.—Generally fine and clear inland. Cloudy weather still prevails on the coast, and light rain is falling at places, the wind being still fresh from S. but not so strong, the barometer steady, and the sea going down. Inland, calms and fine weather prevail. (Details in map above.) Laurieton, S.W., max. 57°, min. 51., rain 0·61, showery, sea heavy.

Queensland.—Generally fine and clear, with light variable winds and calms, and moderate sea.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, wind W.S.W., 28, weather cloudy, temperature 55°; Wentworth, wind calm, weather fine, temperature 47°; Deniliquin, wind W., weather fine, temperature 60°; Albury, wind W., weather cloudy, temperature 52°; Eden, wind S.W., 14 weather fine, sea heavy, temperature 56°; Moruya wind S.S.E., 28, weather fine, sea moderate, temperature 57°; Cape George, wind S., 42, weather fine, sea heavy but moderating, temperature 57°; Sydney, wind S.W., 13, weather cloudy, sea heavy, temperature 56°; Newcastle, wind S., weather showery, sea moderating, temperature 58°; Port Macquarie, wind S.S.W., weather squally, sea heavy, temperature 62°; Clarence River, wind S.S.W., 20, weather fine, sea moderate, temperature 65°; Forbes, wind calm, weather fine, temperature 53°; Goulburn, wind calm, weather fine, temperature 54°; Dubbo, wind calm, weather fine, temperature 52°

Victoria.—Melbourne, wind N., 8, weather dull, temperature 54°; Cape Otway, wind N., 13, weather dull, slight sea, temperature 51°; Portland, wind N., 28, weather dull, smooth sea, temperature 53°; Wilson's Promontory, wind N.E., 23, weather cloudy, sea rather rough, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 11 inches above summer level; at Hay, 4 feet above summer level; at Balranald 7 feet above summer level. Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 8 feet 11 inches above summer level. Darling: At Wentworth, 6 feet 1 inch above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

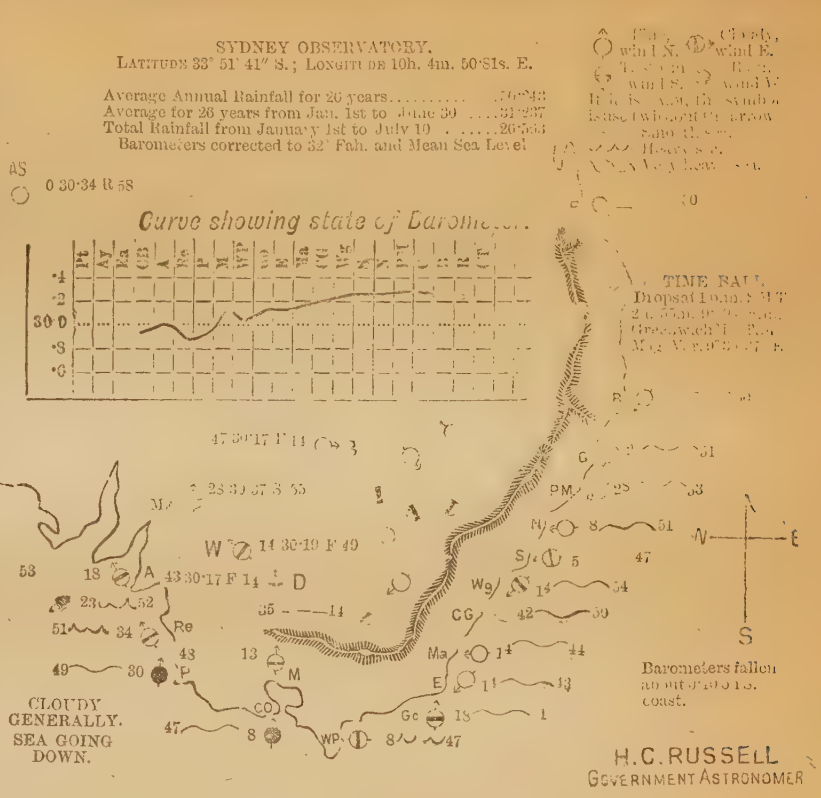
ASTRONOMICAL MEMORANDA FOR JULY 10.

Sun rises at 7.6, sets at 5.4; Moon, 4.39 a.m., 2.59 p.m.; Mercury, 8.0 a.m., 5.59 p.m.; Venus, 8.16 a.m., 6.24 p.m.; Mars, 4.43 a.m., 2.38 p.m.; Jupiter, 9.44 a.m., 8.47 p.m.; Saturn, 5.50 a.m., 3.44 p.m. New Moon, 12th; full moon, 27th.

High water at Fort Denison, July 10: 6.9 a.m., 6.43 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 10, 1885.

Stations	W.T.	Mx.	Mn.	R'in
Albury ..	b	56	33	0
Armidale	b	52	48	0
Balranald	g	66	36	0·03
Bathurst..	g	57	26	0
Bend'meer	n	58	30	0
Bodalla ..	b	63	27	0
Bourke ..	b	70	42	0
Camd'n H.	b	58	52	0·09
C. St. Geo.	c	57	44	0
Carcoar ..	n	48	33	0
Casino .. :	b	70	33	0
Cassilis ..	b	53	33	0
Clarence ..	b	70	47	0
Condob'lin	u	42	25	0
Cooma....	n	55	20	0
Coonab'n.	n	61	23	0
Coonamble	–	—	—	--
Cowra	b	57	46	0
Deniliquin	u	60	35	0
Dubbo ..	b	58	29	0
Eden	b	57	41	0
Euston ..	p	63	45	0
Forbes....	g	—	31	0
Glen Innes	n	55	29	0
Goulburn	b	54	23	0
Grafton ..	b	73	61	0
Gunnedah	b	59	35	0
Hay	g	61	41	0
Hill End	–	—	—	—
Inverell ..	b	59	25	0
Kiandra ..	n	43	14	0
Lismore ..	b	69	38	0
Maitland..	b	—	44	0
Marsdens	c	60	40	0
Menindie	g	60	46	—
Molong ..	–	—	—	
Moree	b	71	35	0
Moruya ..	b	63	39	0
Moss Vale	n	47	31	0
M. Victoria	u	48	34	0
Mudgee ..	n	68	21	0
Murrumbh	c	63	31	0
Murr'r'ndi.	b	54	35	0
Mus'lbrook	c	64	30	0
Narrabri ..	b	69	37	0
Newcastle	b	60	50	0·02
Nowra	b	60	41	0
Orange ..	g	49	28	0
Picton	c	53	37	0
P.M'quarie	b	62	49	0
P.Stephens	c	68	47	2·48
Qu'nbeyan	b	48	29	0
Quirindi ..	b	61	40	0
Singleton	b	58	42	0
SYDNEY ..	c	57	45	0
Tamworth	b	58	30	0
Taralga ..	n	55	22	0
Taree	c	62	49	0·06
T'nt'rfield	u	59	26	0
Wagga....	g	55	32	0
Walcha ..	n	51	33	0
Walgett ..	b	61	34	0
Wentw'rth	g	60	41	0
Wilcannia	–	—	—	—
Woll'ng'ng	b	61	48	0
Young .	n	73	48	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column. Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; R in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally dull inland to Beltana, with light rain recorded; light rain also recorded over Mount Lofty Ranges, and in S.E., several stations reporting over one inch, 0·20 to 0·10 being measured north of Adelaide, and about 0·50 in S.E. Winds, N.W., from 23 to 34 miles per hour. Rainfall, Adelaide, 0·38; Robe, 0·18; Cape Borda, 0·30; M'Donnell Bay, 0·29; Port Augusta, 0·05.

Victoria.—Cloudy and showery on coast, with falling barometers, fresh N. winds and moderate sea; light rain falling inland at Echuca, with S.E. wind; calm, with hoar frost in night, at Omeo; foggy at Melbourne. Rainfall, Portland, 0·07; Cape Otway, 0·02; Lake Entrance, 0·02; Echuca, 0·06.

Tasmania.—Dull on N. coast, with fresh N.N.E, wind.

New Zealand.—Russell, barometer 29·80, wind calm, dull; Wellington, barometer 30·00, wind S.E., showery, rain 0·60; Bluff, barometer 30·20, wind calm, dull.

New South Wales.—Generally cloudy in the centre of colony, fine and clear in the north and north-west, cloudy in Riverina; scattered clouds, smoot sea, and steady barometers on coast; winds light from west, and calm. (Details in map above.)

Queensland.—Fine and clear with light S.W. and S.E. winds and moderate sea; no rain.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, N., 28, dull, temperature 62°; Wentworth, N.N.W., 14, fine, temperature 56°; Deniliquin, N., dull, temperature 58°; Albury, calm, cloudy, temperature 48°; Eden, N.E., 14, cloudy, smooth sea, temperature 55°; Moruya, N., 28, fine, moderate sea temperature 57°; Cape George, N.W., 14, dull, moderate sea, temperature 59°; Sydney, W., 3, fine, temperature 58°; Newcastle, W., 14, fine, moderate sea, temperature 62°; Port Macquarie, S.S.W., 28, fine, moderate sea, temperature 66°; Clarence River, S. 28, fine, moderate sea, temperature 65°; Forbes, calm, fine, temperature 58°; Goulburn, W., fine, temperature 54°; Dubbo, calm, fine, temperature 52°.

Victoria.—Melbourne, N., 18, cloudy, temperature 50°; Cape Otway, N.N.W., 13, cloudy, moderate sea, temperature 50°; Portland, N.W., 28, fine, smooth sea, temperature 55°; Wilson's Promontory, N., 23, cloudy, rough sea, temperature 48°.

STATE OF RIVERS.

Murrumbidgee: At Hay, 3 feet 10 inches above summer level; at Balranald, 6 feet 10 inches above summer level. Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 9 feet 2 inches above summer level. Darling: At Wentworth, 6 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 11.

Sun rises at 7.6, sets at 5.5; Moon, 5.43 a.m., 3.59 p.m.; Mercury, 8.3 a.m., 6.5 p.m.; Venus, 8.17 a.m., 6.26 p.m.; Mars, 4.43 a.m., 2.37 p.m.; Jupiter, 9.40 a.m., 8.44 p.m.; Saturn, 5.46 a.m., 3.40 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 12: 7.12 a.m., 7.41 p.m.

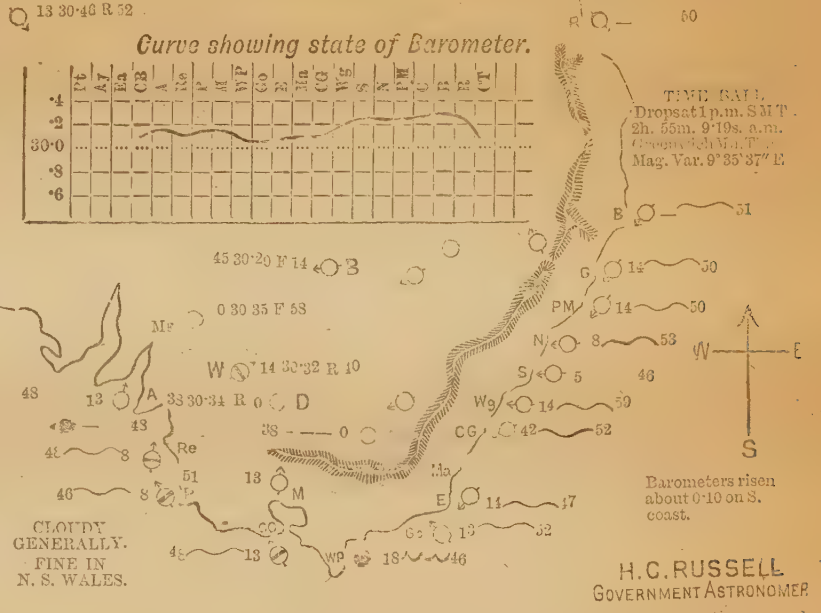
METEOROLOGICAL REPORTS AND MAP FOR JULY 11, 1885.

Stations	wt	Mx	Mn	R in
Albury ..	b	47	36	0·01
Armidale	b	50	48	0
Balranald	b	66	28	0
Bathurst..	n	56	26	0
Bend'meer	b	48	25	0
Bodalla ..	–	—	—	—
Bourke ..	b	72	38	0
Camd'n H.	b	63	44	0
C. St. Geo.	b	59	50	0
Carcoar ..	b	47	34	0
Casino	b	74	35	0
Cassilis ..	b	52	34	0
Clarence ..	b	71	47	0
Condob'lin	b	45	26	0
Cooma.....	n	50	23	0
Coonab'n.	b	69	22	0
Coonamble	–	—	—	—
Cowra	–	—	—	—
Deniliquin	b	54	34	0
Dubbo ..	b	64	28	0
Eden	b	55	41	0
Euston ..	b	63	30	0·06
Forbes....	b	—	34	0
Glen Innes	n	56	26	0
Goulburn	b	54	27	0
Grafton ..	b	79	64	0
Gunnedah	b	58	35	0
Hay	b	62	36	0
Hill End	–	—	—	—
Inverell ..	b	59	25	0
Kiandra ..	b	39	19	0
Lismore ..	b	73	38	0
Maitland..	b	—	46	0
Marsdens	b	61	40	0
Menindie	b	65	48	0
Molong ..	–	—	—	—
Moree	b	72	35	0
Moruya ..	–	—	—	—
Moss Vale	b	49	3[illegible]	0
M. Victoria	b	50	36	0
Mudgee ..	n	68	21	0
Murrumbh	b	55	33	0
Murr'r'ndi.	b	56	37	0
Mus'lbrook	b	60	33	0
Narrabri ..	b	95	35	0
Newcastle	b	60	45	0
Nowra	–	—	—	—
Orange ..	b	47	29	0
Picton	b	57	37	0
P.M'quarie	b	66	49	0
P.Stephens	b	76	42	0
Qu'nbeyan	n	49	30	0
Queindi ..	b	66	30	0
Singleton	b	58	39	0
SYDNEY ..	b	59	43	0
Tamworth	b	63	29	0
Taralga ..	b	59	20	0
Taree	b	67	61	0
T'nt'rfield	n	62	28	0
Wagga....	b	52	34	0
Walcha ..	n	57	25	0
Walgett ..	b	62	33	0
Wentw'rth	c	62	35	0
Wilcannia	–	—	—	—
Woll'ng'ng	b	63	49	0
Young ..	n	61	31	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years..... 50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 11 .. ..26·564
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine, with scattered clouds; dull in parts. Winds, light from N.E. to N.W.; light rain recorded inland to Wilmington, but scattered; heaviest on coast, at Cape Borda, and in S.E. Rainfall: Beachport, 0·52; Cape Borda, 1·19; Adelaide, 0·06; Robe, 0·13; Macdonnell Bay, 0·17.

Victoria.—Cloudy and misty on coast, with light N.W. winds and rising barometers; showery, with rather rough sea, at Wilson's Promontory; fine and clear inland at Echuca and Omeo. Rainfall: Portland, 0·24; Cape Otway, 0·25; Wilson's Promontory, 0·62; Echuca, 0·10; and Omeo, 0·02.

Tasmania.—Fine and clear on north coast, with fresh N.S.W. wind. Rainfall: Low Heads, 0·47.

New South Wales.—Fine and very clear throughout the colony; calm and frosty inland; smooth sea, steady barometer, and light westerly winds. (Details, see map above.)

Queensland.—Fine and clear on east coast, with light S.W. and S.E. winds and moderate sea. Rainfall: Cooktown, 0·14.

3 P.M. OBSERVATIONS.

New South Wales.—Wentworth, calm, cloudy, fine, temperature 59°; Deniliquin, calm, cloudy, temperature 60°; Albury, calm, cloudy, temperature 52°; Eden, N.E., 14, fine, little sea; temperature 58°; Moruya, E.N.E., 28, fine, smooth sea, temperature 63°; Cape George, W., 42, fine, smooth sea, temperature 64°; Sydney, calm, fine, smooth sea, temperature 62°; Newcastle, N.W., 10, fine, smooth sea, temperature 64°; Port Macquarie, S.E., 14, fine, smooth sea, temperature 66°; Clarence River, E.N.E., 1, fine, smooth sea, temperature 68°; Forbes, calm, fine, clear, temperature 50°; Goulburn, calm, fine, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 10 inches above summer level; at Hay, 4 feet above summer level; at Balranald, 7 feet above summer level. Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 9 feet 4 inches above summer level. Darling: At Wentworth, 8 feet 10 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 13.

Sun rises at 7.5, sets at 5.6; Moon, 7.38 a.m., 6.12 p.m.; Mercury, 8.9 a.m, 6.15 p.m.; Venus, 8.17 a.m., 6.30 p.m.; Mars, 4.41 a.m., 2.35 p.m.; Jupiter, 9.34 a.m., 8.38 p.m.; Saturn, 5.39 a.m., 3.33 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 14: 8.57 a.m., 9.21 p.m.

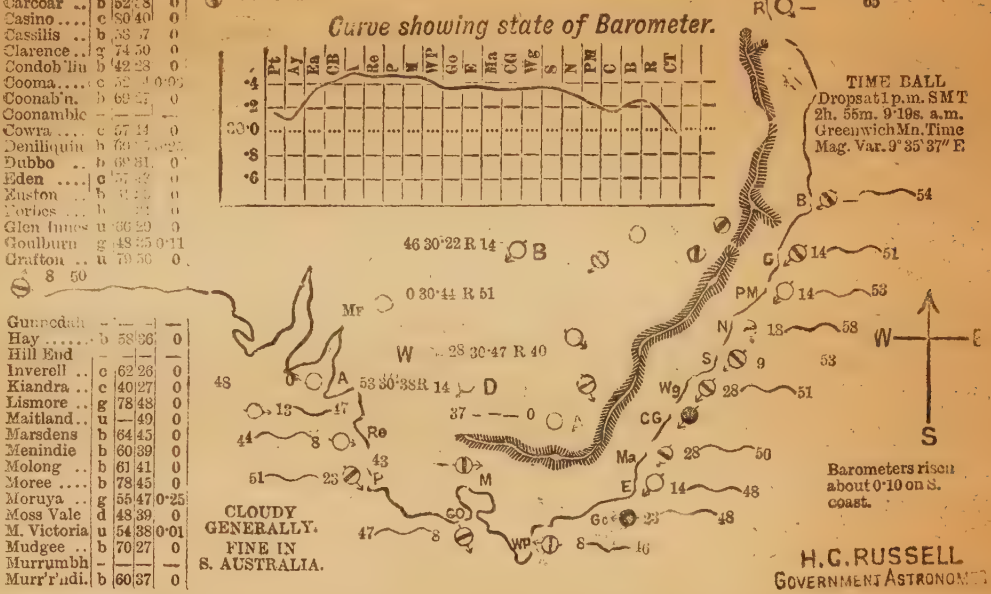
METEOROLOGICAL REPORTS AND MAP FOR JULY 13, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	57	35	0·17
Armidale	b	51	48	0
Balranald	b	69	32	0·04
Bathurst..	c	63	31	0
Bend'meer	b	49	29	0
Bodalla ..	g	70	30	0
Bourke ..	b	45	40	0
Camd'n H.	b	64	45	0
C. St. Geo.	r	64	46	0·39
Carcoar ..	b	52	28	0
Casino	c	80	40	0
Cassilis ..	b	58	37	0
Clarence ..	g	74	50	0
Condob'lin	b	42	28	0
Cooma....	c	52	[illegible]	0·03
Coonab'n.	b	69	47	0
Coonamble	–	—	—	—
Cowra	c	57	14	0
Deniliquin	b	69	[illegible]	0·25
Dubbo ..	b	69	31	0
Eden	c	57	42	0
Euston ..	b	[illegible]	[illegible]	0
Forbes ...	b	[illegible]	[illegible]	0
Glen Innes	u	36	29	0
Goulburn	g	48	25	0·11
Grafton ..	u	79	56	0
Gunnedah	–	—	—	—
Hay	b	58	36	0
Hill End	–	—	—	—
Inverell ..	c	62	26	0
Kiandra ..	c	40	27	0
Lismore ..	g	78	48	0
Maitland..	u	—	49	0
Marsdens	b	64	45	0
Menindie	b	60	39	0
Molong ..	b	61	41	0
Moree	b	78	45	0
Moruya ..	g	55	47	0·25
Moss Vale	d	48	39	0
M. Victoria	u	54	38	0·01
Mudgee ..	b	70	27	0
Murrumbh	–	—	—	—
Murr'r'ndi.	b	60	37	0
Mus'lbrook	b	62	33	0
Narrabri..	c	64	34	0
Newcastle	c	62	49	0
Nowra....	p	59	39	0·11
Orange ..	g	53	35	0
Picton	g	62	48	0·11
P.Macquarie	b	67	45	0
P.Stephens	p	78	46	0·56
Quirindi ..	g	53	33	0
Scone	b	66	35	0
Singleton	c	61	44	0
[illegible] ..	g	62	52	0·16
Tamworth	b	67	35	0
Tenterfield	g	61	26	0
Tibooburra	c	67	47	0
Walcha Road	g	65	32	0
Wagga....	b	56	32	0·11
Walgett ..	c	59	28	0
Yass	b	68	41	0
Yamba	b	58	35	0
Wilcannia	–	—	—	—
Young ng'	g	64	50	0
Cooma ..	b	73	38	0

SYDNEY OBSERVATORY.
Latitude 33° 51′ 41″ S.; Longitude 10h. 4m. 50·81s. E.

Average Annual Rainfall for 24 years ..... 50·243
Average for 26 years from Jan. 1st to June 30 .... 31·237
Total Rainfall from January 1st to July 13 ..... 20·720
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind W.
If it is calm, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL,
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations [illegible] under heading W. gives the state of the weather at 9 a.m.: b, clear; [illegible] rain; f, fog; [illegible], gloomy; [illegible], overcast; [illegible], passing [illegible]; t, thunder; r, thundering. The [illegible] temperature for each of 24 hours. On the [illegible] the rain for the previous 24 hours. The symbols used in the map are explained in the [illegible] of it. At each coast station the [illegible] the direction from which the wind blows [illegible] fine weather; [illegible] cloudy weather; [illegible] and a black [illegible] Note to [illegible] are plotted [illegible] the number [illegible] the wind is [illegible]; [illegible], a symbol showing the state of the sea, [illegible] at 9 a.m. The Weather Curve [illegible] a table of barometers along the coast from North to Cape [illegible]—Pt. [illegible]; Ay, [illegible]; Ea, [illegible]; CB, [illegible]; L, [illegible]; Re, Robe; P, [illegible]; W, [illegible]; WP, [illegible]; Go, [illegible]; F, [illegible]; Ma, [illegible]; CG, [illegible]; Wg, [illegible]; S, [illegible]; N, Newcastle; P, P. Macquarie; PM, Port Stephens; C, [illegible]; B, [illegible]; R, [illegible]; CT, Cootamundra. Inland the state of [illegible] Deniliquin, Wentworth, Bourke, and Alice [illegible] [illegible] to trace the depressions, [illegible] and passing along eastwards; northerly winds [illegible] [illegible].

Western Australia.—Generally cloudy and dull with light N. [illegible] and falling barometers. No rain, sea smooth.

South Australia.—Reports weather generally fine and clear throughout with light S.E. to N.E. winds and calms; light rain recorded inland to Queen, heavier over Mount Lofty Ranges and on coast; foggy in N. territory at Daly Waters. Rainfall: Eucla, 0·03; Streaky Bay, 0·06; Cape Borda, 0·27; Adelaide, [illegible]; Robe, 0·49; M'Donnell Bay, 0·45.

Victoria.—Cloudy on coast with light S.E. winds, rising barometers, and smooth sea; rain inland with fresh S.E. wind at [illegible]. Rainfall: Portland, 0·36, Cape Otway, 0·17; Wilson's, [illegible]; Lake Entrance, 0·16; Echuca, 0·11; and Omeo, 0·04.

Tasmania.—Fine on N. coast with fresh S.E. wind.

New Zealand.—Russell, barometer 29·70, wind W., fine; Wellington, barometer 29·70, wind S.E., fine, 0·13 of rain in night; [illegible] barometer 29·90, wind S., fine.

New South Wales.—Fine inland, with light variable winds and [illegible] barometers; cloudy on coast and mountains, with light [illegible] places; sea smooth, barometers rising, winds S. W. [illegible] (as in map above.)

Queensland.—Generally fine and clear, with light S.W. to S.E. [illegible] and moderate sea. Rainfall: Cooktown, 0·30.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, calm, fine, temperature 54°; Wentworth, S., 11, fine, temperature 52°; Deniliquin, S.E., fine, temperature 61°; Albury, calm, fine, temperature 52°; Eden, S.W., 14, fine, sea smooth, temperature 55°; Moruya, S., 28, squally, sea smooth, temperature 57°; Cape George, S.W., cloudy, sea smooth, temperature 59°; Sydney, S., showery, sea smooth, temperature 51°; Newcastle, S.S.E., dull, sea moderate, temperature 69°; Port Macquarie, S.S.W., 42, cloudy, sea smooth, temperature 65°; Clarence River, S., 28, cloudy, sea smooth, temperature 66°; Goulburn, S.E., 14, raining, temperature 53°; Dubbo, E.N.E., 28, stormy, temperature 57°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 11 inches above summer level; at Hay, 1 feet 6 inches above summer level; at Balranald, 7 feet above summer level. Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 9 feet 8 inches above summer level. Darling: At Wentworth, 7 feet 3 inches above summer level; at Pooncarie and Menindie, summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 14.

Sun rises at 7.9, sets at 5.7; Moon, 8.28 a.m., 7.20 p.m.; Mercury, 8.11 a.m, 6.21 p.m.; Venus, 8.17 a.m., 6.33 p.m.; Mars, 4.41 a.m., 2.33 p.m.; Jupiter, 9.30 a.m., 8.34 p.m.; Saturn, 5.36 a.m., 3.30 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 14: 9.44 a.m., 10.6 p.m.

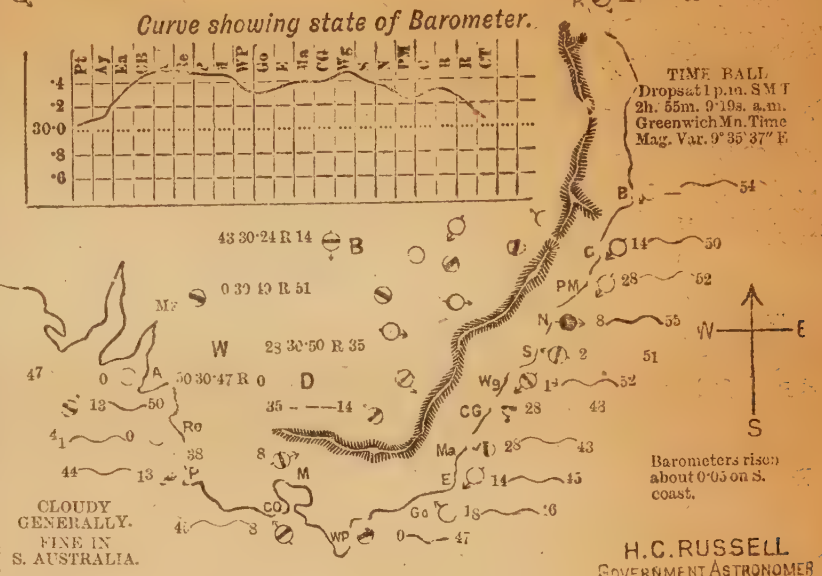
METEOROLOGICAL REPORTS AND MAP FOR JULY 14, 1888.

Stations	wt	Mx	Mn	R'in
Albury ..	c	60	33	0
Armidale	f	52	47	0
Balranald	b	68	27	0
Bathurst..	c	56	37	0
Bend'meer	n	58	33	0
Bodalla ..	b	61	27	0
Bourke ..	b	61	42	0
Camd'n H.	c	64	45	0
C. St. Geo.	c	54	47	0·19
Carcoar ..	b	50	41	0
Casino	c	70	39	0
Cassilis ..	u	50	42	0
Clarence ..	c	72	49	0
Condob'lin	c	45	29	0
Cooma	c	50	32	0·07
Coonab'n.	g	68	28	0
Coonamble	–	—	—	—
Cowra	b	59	31	0
Deniliquin	b	62	30	0
Dubbo ..	b	64	37	0
Eden	b	57	39	0
Euston ..	b	68	38	0
Forbes	b	—	38	0
Glen Innes	c	67	36	0
Goulburn	g	47	38	0·03
Grafton ..	f	73	39	0
Gunnedah	g	62	41	0
Hay	c	59	35	0
Hill End	–	—	—	—
Inverell ..	b	62	26	0
Kiandra ..	c	35	25	0
Lismore ..	c	67	52	0
Maitland..	p	—	54	0·11
Marsdens	b	58	43	0·01
Menindie	g	59	39	0
Molong ..	b	52	41	0
Moree	b	80	44	0
Moruya ..	g	59	30	0
Moss Vale	u	44	40	0·14
M. Victoria	u	46	37	0·30
Mudgee ..	u	60	37	0
Murrumbh	b	60	35	0
Murr'r'ndi.	g	55	39	0
Mus'lbrook	d	59	40	0
Narrabri..	b	69	37	0
Newcastle	r	61	52	1·62
Nowra	c	54	46	0·31
Orange ..	c	50	36	0
Picton	g	56	48	0·02
P.M'quarie	b	65	46	0
P.Stephens	r	63	51	1·10
Qu'nbeyan	g	49	40	0
Quirindi ..	u	68	44	0
Singleton	r	56	47	0·07
SYDNEY ..	g	56	49	0·90
Tamworth	b	67	38	0
Taralga ..	g	63	30	0
Taree	c	63	49	0·02
T'nt'rfield	u	65	37	0
Wagga....	g	57	33	0
Walcha ..	b	57	35	0
Walgett ..	b	66	36	0
Wentw'rth	b	60	32	0
Wilcannia	–	—	—	—
Woll'ng'ng	g	65	49	0·05
Young ..	b	70	39	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 13 .. ..27·610
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the colours headed W. indicate the state of the weather at 9 a.m., b. standing for blue sky; c. denotes cloudy; f. fog; g. gloomy; m. misty; o. overcast; p. passing showers; r. rain; t. thunder; u. threatening. The next column. M. gives the maximum temperature for previous 24 hours. The corresponding minimum temperature for the rain for the previous 24 hours. The symbols used in the map are explained in the key to it. At each coast station the wind symbol is drawn like a vane pointing to the direction from which the wind is coming. A clear circle with a tail means fine weather; a circle with a tail means cloudy weather; and a black spot raining. Next to the symbols are placed figures denoting the number of degrees the wind is from; and, a symbol showing the state of the sea. Lastly, the barometer pressure at 9 a.m. The barometer curve shows the mean state of barometers round the coast: on Perth to Cape Leeuwin:—Pt, Peake; Ay, Adelaide; CB, Cape Borda; A, Adelaide; Pe, Robe; P, Portland; M, Melbourne; W, Wilsons Promontory; Ge, Gabo; E, Eden; Ma, Macquarie; G G, Jervis Bay; Wg, Wagga; Sydney; Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; Ca, Cooktown. In the state of the barometer given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds succeed the rear, and southerly following.

Western Australia.—Cloudy and dull. Light rain falling at Carnarvon, smooth sea, and light northerly winds. Rainfall: Carnarvon, 0·05.

South Australia.—Generally fine, clear, and calm with light E. to N.E. winds; cloudy between Strangeways and Barrow's Creek. Rainfall: Peake, 0·02. Adelaide reports foggy weather at 9 a.m., and hoarfrost in early morning.

Victoria.—Cloudy on coast, with light variable winds, slight sea, and rising barometers; fine inland at Echuca, with fresh S. winds; dull, with dense fog, at Omeo. Rainfall: Portland, 0·01; Wilson's Promontory, 0·04; Lake entrance, 0·02. Melbourne reports foggy weather, and hoarfrost in night.

Tasmania.—Foggy on north coast, fresh S.S.E. wind at Low Heads, barometer 30·46, temperature 36°; no rain.

New Zealand.—Russell, barometer 30·00, wind S. light, weather fine; Wellington, barometer 30·10, wind S.W., squally, weather showery, rain 0·20; Bluff, barometer 30·20, wind calm, weather fine.

New South Wales.—Cloudy and showery on coast, with moderate S.W. winds, rising barometers, and smooth sea. Dull on mountains and inland to Condobolin and Bourke. Fine and clear in Riverina and the S.W. and southern parts of colony generally. Heaviest rain 1·62 at Newcastle. Details in map above.

Queensland.—Generally fine and clear, with light S.W. to S.E. winds and smooth sea. No rain. Dull at Cape Moreton. Sky half clouded at Cooktown. Sea very smooth at Townsville.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 6, fine, temperature 51°; Cape Otway, N.N.W., 6, showery, smooth sea, temperature 52°; Portland, S., 6, cloudy, smooth sea, temperature 53°; Wilson's Promontory, calm, fine, smooth sea, temperature 50°.

New South Wales.—Menindie, S., 28, fine, temperature 54°; Wentworth, calm, fine, temperature 47°; Deniliquin, calm, fine, temperature 54°; Albury, calm, fine, temperature 52°; Eden, N.E., 14, fine, sea smooth, temperature 54°; Moruya, E., 14, cloudy, sea smooth, temperature 57°; Cape George, S., 42, cloudy, sea smooth, temperature 55°; Sydney, S., 12, cloudy, sea smooth, temperature 55°; Newcastle, S.E., raining, sea smooth, temperature 56°; Port Macquarie, S., 28, showery, sea smooth, temperature 65°; Clarence River, S., 14, fine, sea smooth, temperature 65°; Forbes, calm, fine, temperature 57°; Goulburn, calm, cloudy, temperature 54°; Dubbo, E.S.E., 14, cloudy, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 11 inches above summer level; at Hay, 3 feet 4 inches above summer level; at Balranald, 6 feet 10 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level; at Euston, 9 feet 8 inches above summer level. Darling: At Wentworth, 7 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 15.

Sun rises at 7.4, sets at 5.7; Moon, 9.13 a.m., 8.27 p.m.; Mercury, 8.12 a.m., 6.26 p.m.; Venus, 8.17 a.m., 6.35 p.m.; Mars, 4.41 a.m., 2.32 p.m.; Jupiter, 9.27 a.m., 8.31 p.m.; Saturn, 5.33 a.m., 3.27 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 15: 10.27 a.m., 10.48 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 15, 1885.

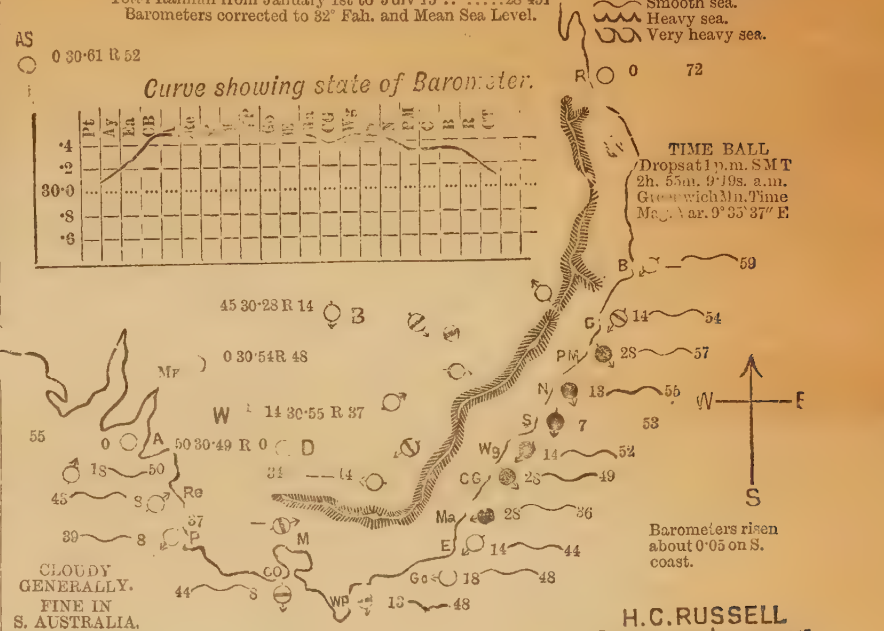
Stations	wt	Mx	Mn	R'in
Albury ..	b	59	33	0
Armidale	r	59	51	0·28
Balranald	n	66	26	0
Bathurst..	g	53	36	0
Bend'meer	g	58	39	0·04
Bodalla ..	g	63	42	0
Bourke ..	b	62	38	0
Camd'n H.	r	64	45	2·70
C. St. Geo.	p	58	47	0·05
Carcoar ..	b	52	43	0
Casino	b	75	41	0
Cassilis ..	u	—	50	0
Clarence ..	c	73	49	0
Condob'lin	b	44	30	0
Cooma	c	58	31	0·02
Coonab'n.	c	66	35	0
Coonamble	–	—	—	—
Cowra	b	59	51	0
Deniliquin	b	61	29	0
Dubbo ..	b	61	40	0
Eden	b	54	40	0
Euston ..	b	63	25	0
Forbes....	b	—	37	0
Glen Innes	c	62	41	0·01
Goulburn	g	49	39	0·15
Grafton ..	c	78	46	0
Gunnedah	q	63	49	0
Hay	b	59	35	0
Hill End	–	—	—	—
Inverell ..	c	63	25	0
Kiandra ..	c	40	23	0
Lismore ..	b	73	52	0
Maitland ..	p	—	59	0·15
Marsdens	b	58	41	0
Menindie	b	58	35	0
Molong ..	b	56	38	0
Moree	c	74	50	0·08
Moruya ..	d	60	42	0
Moss Vale	d	46	41	0·06
M. Victoria	c	46	39	0·14
Mudgee ..	u	58	39	0
Murrumbh	b	63	38	0
Murr'r'ndi.	u	54	48	0·04
Mus'lbrook	u	62	40	0
Narrabri ..	u	70	39	0
Newcastle	p	59	53	2·05
Nowra	c	57	48	0·01
Orange ..	c	51	35	0
Picton	g	57	48	0·07
P.M'quarie	r	65	53	2·71
P.Stephens	c	61	53	0·60
Qu'nbeyan	g	50	38	0
Quirindi ..	b	65	49	0·04
Singleton	u	53	51	0·07
Sydney ..	p	58	52	0·83
Tamworth	c	64	47	0·03
Taralga ..	g	65	28	0
Taree	r	62	51	0·07
T'nt'rfield	c	67	—	0
Wagga....	b	58	30	0
Walcha ..	c	58	39	0·03
Walgett ..	b	66	40	0
Wentw'rth	b	59	30	0
Wilcannia	–	—	—	—
Woll'ng ng	r	60	50	0·04
Young ..	b	67	37	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 .....31·237
Total Rainfall from January 1st to July 15 .. ..28·451
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E.
T. storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W. F. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible]. The next column. Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence [illegible]; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear on S. coast. Dull in places on W. coast. Sea smooth. Rainfall: Geraldton, 0·20; Carnarvon, 1·45.

South Australia reports weather generally fine and clear, with hoar frosts and heavy dews in night; cloudy over west of Streaky Bay. Light and variable winds and calms; steady barometers and smooth and moderate sea. No rain.

Victoria.—Generally cloudy and foggy, smooth sea, rising barometers, and light variable winds on coast; dense fog at Melbourne, and hoarfrost in night; foggy, with S. wind inland at Echuca, calm and dull at Omeo. Rainfall: Cape Otway, 0·03; Lake Entrance, 0·01.

Tasmania.—Fine and clear on north coast, with fresh S.E. wind.

New Zealand.—Russell, barometer 30·30, wind S. light, fine; Wellington, barometer 30·30, wind S.E., fine, rain 0·72; Bluff, barometer 30·40, wind calm, fine and clear.

New South Wales.—Fine and clear in interior; heavy rains on coast, and lighter in places on highlands. Heaviest rain, 2·71 inches at Port Macquarie, and 2·70 at Camden Haven. Smooth and moderate sea, steady barometers, and southerly winds on coast. Details in map.

Queensland.—Generally fine and clear on E. coast; cloudy at Cooktown. Rain: Cape Moreton, 0·77; Cooktown, 0·01. Winds S.W. to S.E., sea moderate.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.E., fine, temperature 45°; Cape Otway, E., 8, fine, smooth sea, temperature 55°; Portland, E.N.E., 8, fine, smooth sea, temperature 54°; Wilson's Promontory, E., 18, cloudy, smooth sea, temperature 52°.

New South Wales.—Menindie, calm, fine, temperature 54°; Wentworth, W., fine, temperature 48°; Deniliquin, calm, fine, temperature 63°; Albury, calm, fine, temperature 52°; Eden, S.E., 14, fine, sea smooth, temperature 54°; Moruya, S.E., 28, fine, sea smooth, temperature 58°; Cape George, S., 28, raining, sea smooth, temperature 57°; Sydney, S., 14, raining, sea moderate, temperature 53°; Newcastle, E., raining, sea smooth, temperature 56°; Port Macquarie, E., 42, raining, sea moderate, temperature 63°; Forbes, calm, fine, temperature 55°; Goulburn, calm, dull, temperature 54°; Dubbo, N.E., 14, cloudy, temperature 57°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 10 inches above summer level; at Hay, 3 feet 4 inches above summer level; at Balranald, 6 feet 8 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level; at Euston, 9 feet 9 inches above summer level. Darling: At Wentworth, 7 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

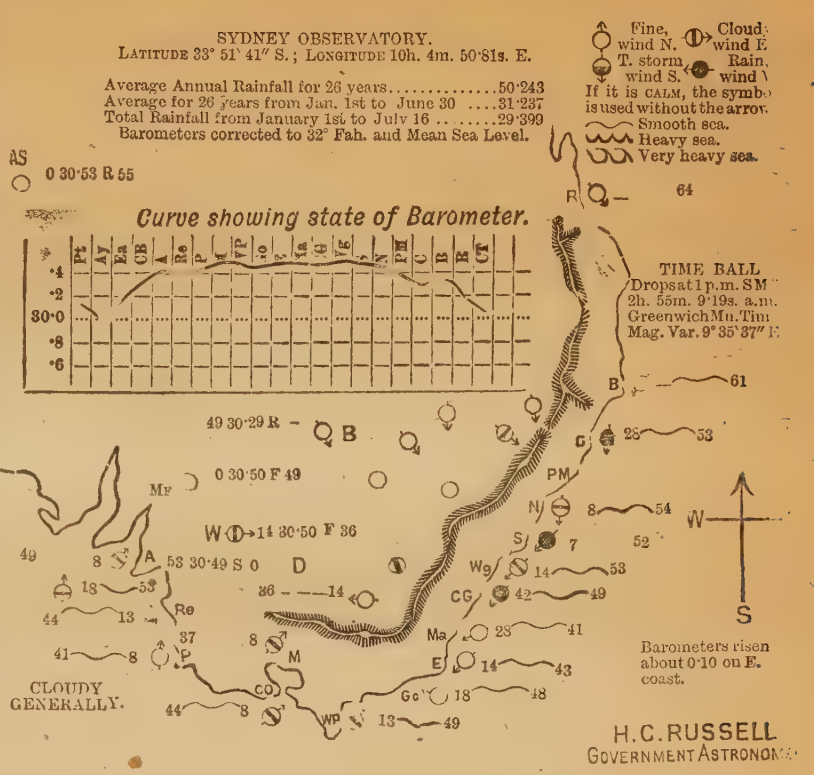
ASTRONOMICAL MEMORANDA FOR JULY 16.

Sun rises at 7.4, sets at 5.8; Moon, 9.53 a.m., 0.31 p.m.; Mercury, 8.13 a.m., 6.30 p.m.; Venus, 8.17 a.m., 6.37 p.m.; Mars, 4.40 a.m., 2.31 p.m.; Jupiter, 9.23 a.m., 8.28 p.m.; Saturn, 5.29 a.m., 3.23 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 11.9 a.m., 11.29 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 16, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	60	35	0
Armidale	g	56	46	0·10
Balranald	b	73	29	0
Bathurst..	b	56	34	0
Bend'meer	n	59	31	0
Bodalla ..	b	62	26	0
Bourke ..	b	68	38	0
Camd'n H.	b	65	45	1·17
C. St. Geo.	p	58	47	0·36
Carcoar ..	b	54	43	0
Casino	b	74	46	0·02
Cassilis ..	c	—	50	0
Clarence ..	p	76	54	0·32
Condob'lin	b	45	28	0
Cooma	n	57	27	0·02
Coonab'n.	b	66	2	0
Coonamble	–	—	—	—
Cowra	b	59	52	0
Deniliquin	b	63	34	0
Dubbo ..	–	—	—	—
Eden	b	55	40	0
Euston ..	c	69	25	0
Forbes....	b	—	37	0
Glen Innes	b	60	41	0·02
Goulburn	g	50	39	0·05
Grafton ..	g	74	51	0·01
Gunnedah	b	63	45	0·08
Hay	b	61	37	0
Hill End	–	—	—	—
Inverell ..	b	63	25	0
Kiandra ..	n	39	13	0
Lismore ..	u	73	55	0·04
Maitland..	p	—	57	0·14
Marsdens	n	63	44	0
Menindie	b	58	35	0
Molong ..	b	62	35	0
Moree	b	73	43	0
Moruya ..	c	68	48	0
Moss Vale	g	47	40	0·03
M. Victoria	d	49	39	0·20
Mudgee ..	u	69	40	0
Murrumbh	b	67	32	0
Murr'r'ndi.	d	59	43	0
Mus'lbrook	g	62	48	0
Narrabri ..	b	80	46	0
Newcastle	g	61	53	0·60
Nowra	c	57	47	0·01
Orange ..	g	52	34	0
Picton	c	56	47	0
P.M'quarie	–	—	—	—
P.Stephens	r	65	51	0·80
Qu'nbeyan	c	51	36	0
Quirindi ..	n	65	43	0
Singleton	u	59	52	0·20
SYDNEY ..	p	57	50	0·95
Tamworth	b	68	36	0·02
Taralga ..	g	43	30	0
Taree	–	—	—	—
T'nt'rfield	u	63	43	0·07
Wagga....	b	58	35	0
Walcha ..	g	59	39	0·10
Walgett ..	b	66	43	0
Wentw'rth	g	58	30	0
Wilcannia	–	—	—	—
Woll'ng ng	g	57	47	0·15
Young ..	b	74	35	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally dull, with light westerly winds and calms; light rain falling at Albany. Smooth sea on coast. Rainfall: Perth, 0·02.

South Australia reports weather generally cloudy and dull inland to Quorn, and scattered clouds to Strangways. Prevailing winds from E. to N., and light, smooth sea. Falling barometers and light N. winds on coast. No rain.

Victoria.—Cloudy and dull, with light N. E. to N. winds and smooth sea. Barometers steady; dense fog at Melbourne; fine and clear, with light S. wind inland at Echuca. No rain.

Tasmania.—Fine and clear, fresh S.S.E. winds.

New Zealand.—Generally fine and clear, Barometer 30·40 over N. Island, with S.E. winds; and 30·50 in S. at Bluff, with calm.

New South Wales.—Generally cloudy and unsettled, with light S.E. to S.W. winds and rising barometers. Smooth sea, light to fresh S.W. winds, and showery weather on coast. Details in map above.

Queensland.—Generally fine and clear, with S.W. to S. winds and moderate sea. Strong S.E. wind and rather rough sea at Cooktown.

3 P.M. OBSERVATIONS.

New South Wales.—Menindie, calm, fine, temperature 58°; Wentworth, calm, cloudy, temperature 48°; Deniliquin, calm, fine, temperature 60°; Albury, calm, fine, temperature 52°; Moruya, E., 28, fine, smooth sea, temperature 58°; Cape Geor S., 42, fine, smooth sea, temperature 56°; Sydney, S., 8, clou smooth sea, temperature 55°; Newcastle, W.S.W., cloudy, smo sea, temperature 58°; Port Macquarie, S.S.E., 14, rain temperature 62°; Clarence River, S., 28, moderate sea, tempe ture 64°; Forbes, calm, fine, temperature 65°; Goulburn, ca dull, temperature 55°.

Victoria.—Melbourne, N., 13, dull, temperature 56°; Cape way, E., 8, dull, smooth sea, temperature 53°; Portland, N., fine, smooth sea, temperature 54°; Wilson's Promontory, N. 18, fine, smooth sea, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 9 inches above summer lev at Hay, 3 feet above summer level; at Balranald, 6 feet 4 inc above summer level. Murray: At Albury, 1 foot 9 inches ab summer level; at Euston, 9 feet 1 inch above summer lev Darling: At Wentworth, 7 feet 7 inches above summer lev at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 17.

Sun rises at 7.3, sets at 5.8; Moon, 10.31 a.m., 10.35 p.m Mercury, 8.14 a.m., 6.35 p.m.; Venus, 8.17 a.m., 6.39 p.m Mars, 4.40 a.m., 2.30 p.m.; Jupiter, 9.20 a.m., 8.25 p.m.; Satu 5.26 a.m., 3.20 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 11.50 a.m.

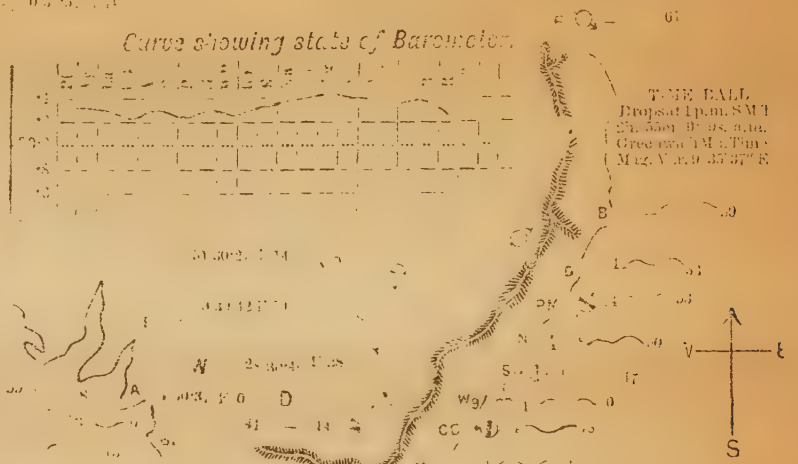
METEOROLOGICAL REPORTS AND MAP FOR JULY 17, 1885.

Stations	W.T.	Max.	Min.	R.
Albury	p	60	30	0
Armidale	u	53	43	0
Balranald	b	72	30	0
Bathurst	c	76	34	0
Beechworth	g	57	34	0
Bodalla	c	64	28	0
Bourke	c	66	48	0
Brend'n H.	c	64	4[illegible]	0·21
C. St. Geo.	c	55	3	0
Carcoar	b	52	41	0
Casino	b	70	41	0
Cassilis	c	54	39	0
Clarence	c	75	50	0·08
Condobolin	c	49	32	0
Cooma	b	58	25	0
Coonabarabran	g	65	30	0
Coonamble	[illegible]	[illegible]	[illegible]	—
Cowra	b	54	43	0
Deniliquin	b	61	38	0
Dubbo	b	63	38	0
Echuca	c	57	39	0
Euston	b	54	28	0
Forbes	b	[illegible]	39	0
Glen Innes	c	[illegible]	38	0
Goulburn	f	55	36	0
Grafton	c	71	50	0·1
Grenfell	g	57	41	0
Hay	b	6[illegible]	41	0
Hill End	[illegible]	[illegible]	—	
Inverell	b	6[illegible]	25	0
Kiandra	n	7[illegible]	[illegible]	0
Lismore	c	[illegible]	40	0·04
Maitland	[illegible]	[illegible]	41	0·1
Marsden	b	63	50	0
Menindie	b	68	45	0
Moama	c	[illegible]	36	0
Moree	g	79	41	0
Moruya	c	[illegible]	40	0
Moss Vale	f	48	35	0
M. Victoria	c	[illegible]	6[illegible]	4
Mudgee	u	6[illegible]	36	
Murrumbidgee	c	68	37	0
Murray[illegible]	f	76	33	0
Mus'b. [illegible]	c	6[illegible]	[illegible]	0
Narrabri	u	78	44	0
Newcastle	g	60	49	0·06
Nowra	c	56	47	0·06
Orange	g	51	34	0
Picton	c	57	41	0
P.M'quarie	u	60	49	0·08
P.Stephens	c	67	50	0·10
Qu'nbeyan	g	51	36	0
Quirindi	u	66	43	0
Singleton	b	55	45	0
SYDNEY	g	56	47	0·06
Tamworth	c	66	40	0
Taralga	b	69	32	0
Taree	c	63	46	0·02
T'nt'rfield	b	58	36	0
Wagga	c	60	42	0
Walcha	c	58	38	0·02
Walgett	c	67	44	0
Wentw'rth	n	62	32	0
Wilcannia	—	—	—	—
Woll'ng'ng	c	60	42	0
Young	g	78	39	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 151h. 1m. 50·8s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 26 years from June 1st to June 30th ..... 3·257
Total Rainfall from January 1st to July 17 ..... 2·[illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind S.
If it is calm, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W.P., Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P.M., Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light N.E. winds and calms; smooth sea. Rain: Perth, 0·10.

South Australia reports weather generally fine, scattered clouds at a few stations; light N.E. to N.W. winds, smooth sea, steady barometers, and light N. wind on coast.

Victoria.—Generally cloudy, with light northerly winds, smooth sea, and falling barometers; foggy at Melbourne; fine and clear, with S. wind at Echuca. No rain.

Tasmania.—Dull, with light S.E. winds on north coast.

New Zealand.—Russell, barometer 30·30, wind S.E., showery; Wellington, barometer 30·10, wind S.E., fine; Bluff, barometer 30·50, wind N.E., dull.

New South Wales.—Generally cloudy on coast and mountains, rough sea, falling barometers, and light N. winds on coast; fine and calm inland. Details in map above. Gabo Island reports slight shock of earthquake at 8.50 a.m., lasting 45 seconds, motion from S. to N.

Queensland.—Generally fine on coast, with light S.W. to S.E. winds and moderate sea. Showery at Cooktown and Cape Moreton. Rainfall—Cooktown, 0·01.

9 P.M. OBSERVATIONS.

New South Wales, Cape St. George, N., 11, dull, smooth sea, temperature 55°; Eden, N.E., 14, fine, slight sea, temperature 54°; Forbes, calm, 0, fine and clear, temperature 62°; Goulburn, calm, dull, temperature 56°; Newcastle, S., fine, smooth sea, temperature 59°; Port Macquarie, S., 28, dull, smooth sea, temperature 45°; Sydney, W., 8, cloudy, smooth sea, temperature 59°.

Victoria.—Melbourne, N., 12, fine, temperature 60°; Cape Otway, N.W., 6, gloomy, moderate sea, temperature 59°; Portland, N.W., 26, cloudy, smooth sea, temperature 58°; Wilson's Promontory, N.W., 12, cloudy, smooth sea, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 9 inches above summer level; at Hay, 2 feet 10 inches above summer level; at Balranald, 6 feet 4 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 8 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.—

ASTRONOMICAL MEMORANDA FOR JULY 18.

Sun rises at 7.3, sets at 5.9; Moon, 11.8 a.m., 11.34 p.m.; Mercury, 8.15 a.m., 6.39 p.m.; Venus, 8.17 a.m., 6.41 p.m.; Mars, 4.39 a.m., 2.29 p.m.; Jupiter, 9.16 a.m., 8.22 p.m.; Saturn, 5.22 a.m., 3.16 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 12.11 a.m., 12.33 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 18, 1885.

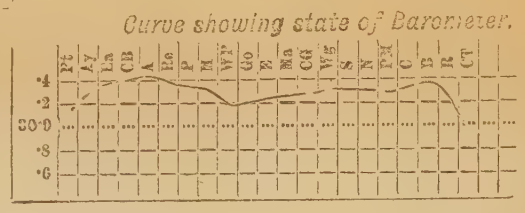
Stations	wt	Mx	m	R in
Albury ..	c	59	39	0
Armidale	b	56	40	0
Balranald	b	83	29	0
Bathurst ..	n	57	26	0
Bend'meer	n	55	29	0
Bodalla ..	c	65	29	0
Bourke ..	b	72	40	0
Camd'n H.	b	61	46	0
C. St. Geo.	c	58	43	0
Carcoar ..	n	50	35	0
Casino	b	71	37	0
Cassilis .	b	58	34	0
Clarence ..	c	64	49	0
Condob'lin	b	43	29	0
Cooma	c	58	24	0
Coonab'n.	b	67	25	0
Coonamble	–	—	—	—
Cowra	–	—	—	—
Deniliquin	b	68	36	0
Dubbo ..	b	68	29	0
Eden	–	—	—	—
Euston ..	b	63	30	0
Forbes....	b	—	37	0
Glen Innes	f	63	38	0
Goulburn	n	57	27	0
Grafton ..	b	74	46	0
Gunnedah	b	63	40	0
Hay .. .	c	65	35	0
Hill End	–	—	—	—
Inverell ..	b	63	35	0
Kiandra ..	n	40	17	0
Lismore ..	b	66	45	0
Maitland..	f	78	48	0
Marsdens	b	65	41	0
Menindie	b	67	40	0
Molong ..	b	64	35	0
Moree	b	74	39	0
Moruya ..	c	63	38	0
Moss Vale	n	49	33	0
M. Victoria	n	49	30	0
Mudgee ..	b	63	22	0
Murrumbh	b	69	31	0
Murr'r'ndi.	n	51	36	0
Mus'lbrook	f	63	32	0
Narrabri ..	b	69	37	0
Newcastle	b	60	44	0
Nowra	b	—	—	0
Orange ..	b	50	29	0
Picton	b	60	35	0
P.M'quarie	b	64	47	0
P.Stephens	b	75	48	0·02
Qu'nbeyan	n	54	34	0
Quirindi ..	b	67	39	0
Singleton	b	60	41	0
SYDNEY ..	b	59	43	0·01
Tamworth	b	65	32	0
Taralga ..	n	61	25	0
Taree	b	65	43	0
T'nt'rfield	c	64	39	0
Wagga....	b	60	36	0
Walcha ..	n	55	30	0
Walgett ..	b	65	38	0
Wentw'rth	c	69	34	0
Wilcannia	–	—	—	—
Woll'ng ng	b	63	44	0
Young ..	b	78	36	0

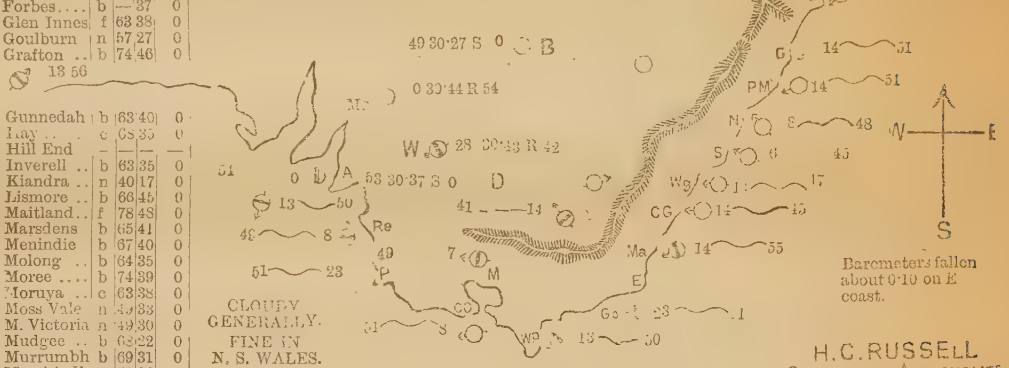
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 18 .. ..29·461
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E. — T. storm wind S. — Rain, wind W. If it is CALM, the symbol is used without the arrow. — Smooth sea. — Heavy sea. — Very heavy sea.





TIME BALL
Drops at 1 p.m. S.M.T
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E

Barometers fallen about 0·10 on E coast.

CLOUDY GENERALLY. FINE IN N. S. WALES.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, tending for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, cloudy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunderstorm; w, strong winds. The next column, Mx, gives the maximum temperature for previous 24 hours. M is the corresponding minimum temperature; R in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is blowing per hour; next, a symbol showing the state of the Sea; and, last, a figure or letter showing the shade temperature at 9 a.m. The barometer curves show the state of the barometer for the last 24 hours, reduced to 32° Fah.:—Pe, Perth; Ay, Albany; La, Esperance Bay; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, Wilson's Promontory; Go, Gabo Island; E, Eden; Ma, Marsdens; Wg, Wellington; CG, Cape Otway; N, Newcastle; S, Sydney; C, Clarence River; B, Brisbane; R, Rockhampton; CT, Cooktown; S, Cardiff. Mt. Bingil the state of the barometer is given in figures at Albany, Port Augusta, Wentworth, Bourke, and Adelaide Springs. The arrows show the direction of the wind, the figures, beginning in Western Australia, at Perth, along eastwards; and other winds preceding them are southerly throughout.

Western Australia.—Perth, fine and calm; Esperance Bay, light N.E. wind and moderate sea, sky half clouded.

South Australia reports weather generally dull and misty inland to Laura, light variable winds and calms prevailing, light rains recorded in places on and near coast, sea smooth, barometers rising. Rainfall: Adelaide, 0·04; Robe, 0·10; M'Donnell Bay, 0·22; Dense fog at Streaky Bay; fine and clear, with light S.E. winds in Northern Territory.

Victoria.—Generally cloudy, smooth sea, slowly rising barometers, and light S.W. winds on coast; light rain falling with fog at Melbourne; showery during night at Wilson's Promontory; dull inland at Echuca, with light N.W. wind. Rainfall: Melbourne, 0·10; Portland, 0·10; and Wilson's, 0·20.

Tasmania.—Fresh W.S.W. winds on north coast. Barometer: Low Heads, 30·21, temperate 47° Rain, 0·08.

New Zealand.—Russell, barometer 30·30, wind E., fresh breeze; Wellington, barometer 30·40, wind E., fine and clear; Bluff, barometer 30·30, wind N., fine and clear.

New South Wales.—Fine and clear throughout; foggy in places (see list above). Frosty on high lands. Light westerly winds and calms prevail generally. On the coast the sea is smooth with fine hazy weather, light W. winds and falling barometers. (Full details of weather at each station will be found on map above.)

Queensland.—Generally fine, clear weather on E. coast, with light S.W. to S.E. winds, and moderate sea. Dull with rough sea and strong S.E. wind at Cooktown. Rainfall: Cape Moreton, 0·35; Cooktown, 0·30.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegrams; Cape Otway, S.W., 6, fine, moderate sea, temperature 52°; Portland, S., 18, fine, smooth sea temperature 55°; Wilson's Promontory, S.W., 24, cloudy, smooth sea, temperature 51°.

New South Wales.—Albury, calm, fine, temperature 58°; Cape St. George, W., 14, fine, smooth sea, temperature 58°; Clarence River, S.E., 10, fine, smooth sea, temperature 65°; Deniliquin calm, fine, temperature 57; Dubbo, calm, fine, temperature 56; Eden, calm, fine, cloudy, little sea, temperature 59°; Goulburn calm, fine, temperature 54°; Menindie, S.W., 14, fine, warm temperature 57; Moruya, S.S.E., 28, fine, smooth sea, temperature 59°; Newcastle, S.E., 10, fine, no sea, temperature 59°; Port Macquarie, S.E., 14, fine, smooth sea, temperature 66°; Sydney, S., 10, fine, clear, smooth sea, temperature 53°; Wentworth, calm, fine temperature 50.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 8 inches above summer level at Hay, 2 feet 10 inches above summer level; at Balranald, 6 feet 7 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 8 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

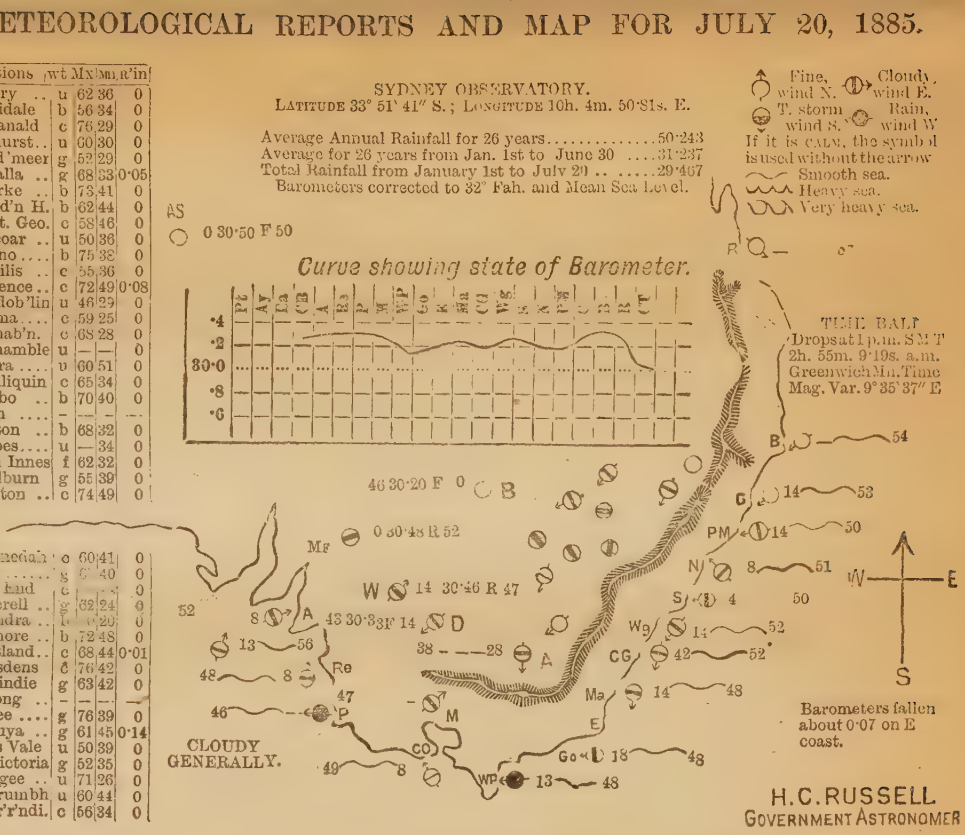
ASTRONOMICAL MEMORANDA FOR JULY 20.

Sun rises at 7.2, sets at 5.10; Moon, 12.22 p.m., 12.32 a.m. Mercury, 8.17 a.m., 6.48 p.m.; Venus, 8.17 a.m., 6.45 p.m. Mars, 4.38 a.m., 2.27 p.m.; Jupiter, 9.9 a.m., 8.16 p.m.; Saturn, 5.15 a.m., 3.9 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 1.46 a.m., 2.17 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 20, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	u	62	36	0
Armidale	b	56	34	0
Balranald	c	76	29	0
Bathurst..	u	60	30	0
Bend'meer	g	52	29	0
Bodalla ..	g	68	33	0·05
Bourke ..	b	73	41	0
Camd'n H.	b	62	44	0
C. St. Geo.	c	58	46	0
Carcoar ..	u	50	36	0
Casino	b	75	38	0
Cassilis ..	c	55	36	0
Clarence ..	c	72	49	0·08
Condob'lin	u	46	29	0
Cooma	c	59	25	0
Coonab'n.	c	68	28	0
Coonamble	u	—	—	0
Cowra	u	60	51	0
Deniliquin	c	65	34	0
Dubbo ..	b	70	40	0
Eden	—	—	—	—
Euston ..	b	68	32	0
Forbes....	u	—	34	0
Glen Innes	f	62	32	0
Goulburn	g	55	39	0
Grafton ..	c	74	49	0
Gunnedah	c	60	41	0
Hay	g	[illegible]	40	0
Hill End	c	[illegible]	[illegible]	0
Inverell ..	g	62	24	0
Kiandra ..	b	[illegible]	20	0
Lismore ..	b	72	48	0
Maitland..	c	68	44	0·01
Marsdens	c	76	42	0
Menindie	g	63	42	0
Molong ..	—	—	—	—
Moree	g	76	39	0
Moruya ..	g	61	45	0·14
Moss Vale	u	50	39	0
M. Victoria	g	52	35	0
Mudgee ..	u	71	26	0
Murrumbh	u	60	44	0
Murr'r'ndi.	c	56	34	0
Mus'lbrook	c	61	32	0
Narrabri ..	g	67	36	0
Newcastle	g	60	49	0
Nowra	c	26	46	0
Orange ..	g	50	31	0
Picton	g	59	43	0
P.M'quarie	c	65	44	0
P.Stephens	c	71	47	0
Qu'nbeyan	c	54	34	0
Quirindi ..	u	66	42	0
Singleton	b	59	41	0
SYDNEY ..	g	61	47	0·01
Tamworth	c	65	36	0
Taralga ..	g	73	31	0
Taree	g	65	45	0
T'nt'rfield	f	64	34	0
Wagga....	c	60	31	0
Walcha ..	f	50	26	0
Walgett ..	g	65	38	0
Wentw'rth	g	63	44	0
Wilcannia	c	—	—	0
Woll'ng'ng	g	63	46	0·05
Young ..	u	72	43	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine, but cloudy, dull, and threatening in parts; winds light and variable; sea on S. coast smooth, with light northerly winds and falling barometers; fine and clear in Northern Territory. Rain: Cape Borda, 0·80; Robe, 0·41; M'Donnell Bay, 0·10.

Victoria.—Cloudy and dull, light rain falling in places on coast, winds light from W. and N.W.; barometers rising; slight and moderate sea on coast; sky half clouded inland at Echuca. Rainfall: Melbourne, 0·01; Portland, 0·14; Cape Otway, 0·35; Wilson's Promontory, 0·21; Lake Entrance, 0·06.

Tasmania.—Foggy, with clouds, on north coast; fresh S.E. wind at Low Heads. No rain.

New Zealand.—Russell, barometer 30·00, wind N.W., showery; Wellington, barometer 29·90, wind S.E., showery, rain 0·35; Bluff, barometer 30·00, wind N.W., fine and clear.

New South Wales.—Cloudy and dull, with light variable winds and calms generally. Smooth sea, falling barometers, and light S.W. to N.W. winds on coast. Foggy in New England district. Very little rain fallen. Details in map above.

Queensland.—Generally fine and clear on E. coast, with light S.W. to S.E. winds and moderate sea. Dull at Cooktown, with fresh S.E. wind and rather rough sea. Rainfall: Cape Moreton, 0·25; Cooktown, 0·04.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 18, cloudy but fine, temperature 52; Cape Otway, W., 8, showery, misty, moderate sea, temperature 53°; Portland, W.S.W., 13, fine, slight sea, temperature 55; Wilson's Promontory, W., 13, light rain, slight sea; temperature 53°.

New South Wales.—Albury, calm, fine, temperature 52°; Cape St. George, S., 56, cloudy, smooth sea, temperature 55°; Clarence River, N.E., 14, dull, smooth sea, temperature 67°; Deniliquin, S., dull, temperature 62; Dubbo, N.W., 14, fine, temperature 55; Eden, S., 14, fine, smooth sea, temperature 57°; Forbes, calm, dull and threatening, temperature 55; Goulburn, N.W., 14, cloudy, temperature 56°; Menindie, N., 28, cloudy, temperature 55°; Newcastle, S., 14, dull, smooth sea, temperature 59°; Port Macquarie, N.N.E., 14, cloudy, smooth sea, temperature 64°; Sydney, S., 7, cloudy and dull, smooth sea, temperature 56°; Wentworth, N.W., 14, fine, temperature 51.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 6 inches above summer [illegible] at Hay, 2 feet 4 inches above summer level; at Balran[illegible] inches above summer level. Murray: At Albury, [illegible] above summer level; at Euston, 9 feet 10 inches [illegible] level. Darling: At Wentworth, 7 feet 9 inches [illegible] level; at Pooncarie, Menindie, Wilcannia, and Bou[illegible]

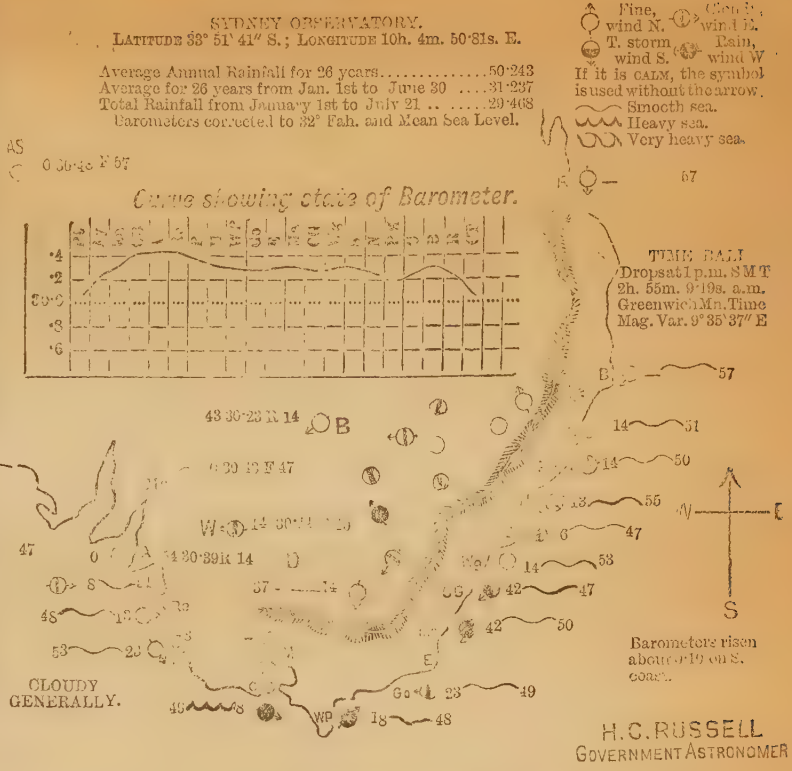
ASTRONOMICAL MEMORANDA FOR JULY 21.

Sun rises at 7.1, sets at 5.11; Moon, 1.2 p.m., 1[illegible] Mercury, 8.17 a.m., 6.53 p.m.; Venus, 8.17 a.m., [illegible] Mars, 4.37 a.m., 2.25 p.m.; Jupiter, 9.6 a.m., 8.14 p[illegible] 5.12 a.m., 3.6 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 2.47 a.m., 3.22 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 21, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	n	58	33	0
Armidale	g	54	38	0
Bal'ranald	g	73	32	0
Bathurst..	g	54	34	0
Bend'meer	b	50	28	0
Bodalla ..	r	66	41	0·92
Bourke ..	b	65	35	0
Camd'n H.	c	62	46	0
C. St. Geo.	r	54	46	0·21
Carcoar ..	b	49	41	0
Casino	b	74	35	0
Cassilis .	g	53	23	0
Clarence ..	c	74	5[illegible]	0
Condob'lin	b	5[illegible]	43	0
Cooma ...	r	51	8[illegible]	0·08
Coonab'n.	c	63	32	0
Coonamble	b	—	—	0
Cowra	c	63	51	0
Deniliquin	b	63	38	0·32
Dubbo ..	b	67	33	0
Eden	—	—	—	—
Euston ..	c	72	24	0
Forbes ..	b	—	38	0
Glen Innes	f	62	32	0
Goulburn	g	52	34	0
Grafton ..	g	71	44	0
Gunnedah	b	61	42	0
Hay	g	65	39	0
Hill End	b	—	—	0
Inverell ..	o	57	26	0
Kiandra ..	c	32	27	0
Lismore ..	c	72	[illegible]	0
Maitland ..	u	74	40	0
Marsdens	b	59	43	0
Menindie	b	5[illegible]	37	0
Molong ..	b	55	36	0
Moree	g	70	43	0
Moruya ..	r	57	5[illegible]	[illegible]
Moss Vale	u	48	38	0
M. Victoria	g	49	25	0
Mudgee ..	b	61	22	0
Murrumbih	b	55	46	0·02
Murr'r'ndi.	g	55	43	0
Mus'lbrook	c	64	41	0
Narrabri ..	u	74	42	0
Newcastle	c	61	49	0
Nowra	—	—	—	—
Orange ..	o	50	34	0
Picton	b	56	42	0
P.M'quarie	g	65	48	0
P.Stephens	g	70	47	0
Qu'nbeyan	g	50	32	0
Quirindi ..	g	61	45	0
Singleton	b	58	41	0
SYDNEY ..	[illegible]	[illegible]	7	0
Tamworth	c	[illegible]	[illegible]	0
Taralga ..	[illegible]	[illegible]	[illegible]	0
Taree	g	[illegible]	[illegible]	0
T'nt'rfield	b	61	36	0
Wagga....	c	55	2[illegible]	0
Walcha ..	g	[illegible]	[illegible]	0
Walgett ..	b	63	29	0
Wentw'rth	c	63	[illegible]	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	64	49	0
Young ..	p	75	41	0·02



NOTES EXPLANATORY OF MAP.

In the list of stations the [illegible] W.T. [illegible] the state of the weather at [illegible] a.m.: b [illegible]; c, [illegible]; d, [illegible]; f, fog; g, [illegible]; h, hazy; [illegible]; o, [illegible]; r, [illegible] rain; s, snow; t, thunder; [illegible] gives the [illegible] temperature for previous 24 hours. [illegible] the [illegible] temperature; [illegible] for the previous 24 hours. [illegible] the magn. At each coast station the wind symbol is [illegible] to the direction from which the wind is [illegible] weather; a circle with bar, cloudy [illegible] are placed figures denoting [illegible] the state [illegible]. The barometer [illegible] P., Portland; [illegible] Moruya; [illegible] Jervis [illegible] Macquarie; C., Clarence [illegible] Island the [illegible] to [illegible] previous [illegible] 8 preceding [illegible]

Western Australia.—Cloudy generally, raining on west coast at Perth, fall 0·69 and 0·25 at Esperance Bay, sea moderate, wind light from north.

South Australia reports weather generally fine and clear; scattered clouds on coast east of Cape Borda, with smooth sea and rising barometers, wind S.E.; fine, with S.E. wind and calm, in Northern Territory and the interior. Rainfall: Powell's Creek, 0·01; Farina, 0·08; Robe, 0·03; M'Donnell Bay, 0·08.

Victoria.—Cloudy generally, showery on coast at Wilson's Promontory and at Melbourne; sea smooth generally, rough at Cape Otway; barometers rising; wind N.E. to S.E., light to fresh. Rainfall: Melbourne, 0·16; Portland, 0·10; Cape Otway, 0·13; Wilson's Promontory, 0·79; Echuca, 0·16, with S.W. wind and dull weather.

Tasmania.—Fine and clear on north coast, with strong S.S.E. wind; no rain.

New Zealand.—Generally fine and clear, barometers 30·10; wind S.E. at Bluff, but generally calm.

New South Wales.—Generally cloudy and unsettled, light rain falling at places on the coast S. of Sydney; inland at Yo[illegible] The clear weather prevails in the N.W. and W., except [illegible] few stations on the high lands. Details of weather, &c., at each station will be found in map above. On the coast the sea is smooth, with light S.W. winds and rising barometers. Rain at Temora not in map is 0·03, with dull weather.

Queensland.—Generally fine and clear on E. coast, with moderate sea, and light S.W. winds. Strong S.E. wind and dull weather at Cooktown. Rainfall: Cape Moreton, 0·03.

3 P.M. OBSERVATIONS.

Victoria.—Barometers steady; Melbourne, S.W., 6, fine, temperature 51; Cape Otway, E.S.E., 6, fine, rough sea, temperature 54°; Portland, S.E., 24, cloudy, smooth sea, temperature, 55°; Wilson's Promontory, E., 12, cloudy, moderate sea; temperature 56°.

New South Wales.—Albury, S., cloudy, temperature 52°; Cape St. George, S.W., raining, smooth sea, temperature 51°; Deniliquin, S., fine, temperature 60; Dubbo, S.E., 42, fine, temperature 52°; Eden, S.W., 14, cloudy, smooth sea, temperature 49°; Forbes, calm, fine, temperature 40°; Goulburn, S. 14, threatening, temperature 55°; Menindie, S., 28, fine, temperature 54°; Moruya, N.N.W., 28, cloudy, moderate sea, temperature 50; Newcastle, S., dull, smooth sea, temperature 58°; Port Macquarie, S.S.W., 14, cloudy, smooth sea, temperature 62°; Sydney, S.S.W., 14, cloudy, moderate sea, temperature 56°; Wentworth, W., 14, fine, temperature 49°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 6 inches above summer level; at Hay, 2 feet 2 inches above summer level; at Balranald, 4 feet 7 inches above summer level. Murray: At Albury, 1 foot 5 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 10 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

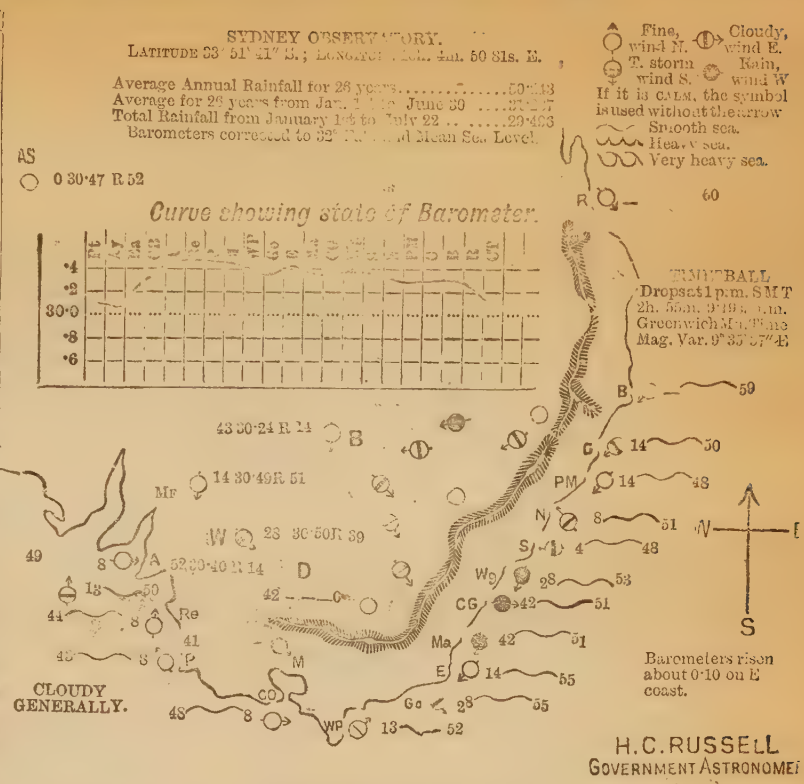
ASTRONOMICAL MEMORANDA FOR JULY 22.

Sun rises at 7.1, sets at 5.12; Moon, 1.43 p.m., 2.22 a.m.; Mercury, 8.17 a.m., 6.56 p.m.; Venus, 8.17 a.m., 6.49 p.m.; Mars, 4.36 a.m., 2.24 p.m.; Jupiter, 9.3 a.m., 8.11 p.m.; Saturn 5.9 a.m., 3.3 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 3.56 a.m., 4.31 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 22, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	59	36	0
Armidale	b	53	36	0
Balranald	b	64	30	0·06
Bathurst..	b	56	29	0
Bend'meer	g	48	27	0
Bodalla ..	r	57	42	1·20
Bourke ..	b	61	35	0
Camd'n H.	b	60	46	0
C. St. Geo.	r	58	46	0·79
Carcoar ..	b	50	36	0
Casino	b	76	33	0
Cassilis ..	g	5[illegible]	4[illegible]	0
Clarence ..	c	74	47	0
Condob'lin	b	45	[illegible]	0
Cooma	c	46	[illegible]	0·18
Coonab'n.	n	61	26	0
Coonamble	b	—	—	0
Cowra	b	6[illegible]	[illegible]	0
Deniliquin	b	[illegible]	[illegible]	0
Dubbo ..	b	6[illegible]	32	0
Eden	b	54	48	0·06
Euston ..	b	63	36	0
Forbes....	b	—	33	0
Glen Innes	g	50	31	0
Goulburn	u	47	38	0·46
Grafton ..	c	76	41	0
Gunnedah	c	60	41	0
Hay	b	61	39	0
Hill End	n	—	—	0
Inverell ..	b	57	35	0
Kiandra ...	g	35	25	0
Lismore ..	c	73	45	0
Maitland..	c	63	44	0
Marsdens	b	60	43	0
Menindie	n	59	37	0
Molong ..	n	62	34	0
Moree	r	70	43	0
Moruya ..	r	59	45	1·54
Moss Vale	r	45	40	0·28
M. Victoria	u	50	35	0
Mudgee ..	b	67	29	0
Murrumbh	u	60	49	0·03
Murr'r'ndi.	f	54	41	0
Mus'lbrook	c	64	35	0
Narrabri ..	u	64	35	0
Newcastle	g	60	47	0·17
Nowra	c	55	49	1·18
Orange ..	b	50	32	0
Picton	r	58	41	0·27
P.M'quarie	b	64	44	0·03
P.Stephens	g	71	49	0·02
Qu'nbeyan	g	46	40	0·70
Quirindi ..	—	—	—	—
Singleton	b	56	41	0
SYDNEY ..	u	58	47	0·03
Tamworth	c	64	37	0
Taralga ..	r	66	25	0·18
Taree	c	64	44	0·36
T'nt'rfield	u	60	35	0
Wagga....	b	59	36	0
Walcha ..	f	51	33	0
Walgett ..	n	—	31	0
Wentw'rth	c	60	31	0
Wilcannia	b	—	—	0
Woll'ng'ng	r	64	47	0·20
Young ..	g	71	43	0·02



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; R'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf, Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine generally on west coast, dull on S.; sea smooth. Rain: Albany, 0·03; Perth, 0·24; Esperance Bay, 0·10; Geraldton, 1·09.

South Australia.—Generally fine and clear with frosts and heavy dew in night, smooth sea and steady barometer on S. coast; winds generally light from E. to N. and calm. No rain.

Victoria.—Foggy with scattered clouds round coast; fine in-land; wind on coast N.E. to S.E.; barometer rising, sea smooth, southerly winds and calm inland. No rain.

Tasmania.—Dull on north coast with light S.S.E. wind.

New Zealand.—Russell, barometer 30·10, wind calm, fine; Wellington, barometer 30·00, wind N., fine; Bluff, barometer 30·00, wind W., showery.

New South Wales.—Weather generally very cloudy and unsettled on coast and mountains, with light rain falling at places. Vide map. Fine clear weather prevails inland generally, with light variable winds and calms and rising barometers. On the coast the wind is light to fresh and from S.W., the barometers rising and the sea smooth. Gundaroo reports rain from S.E., 0·57, and still falling at 9 a.m.

Queensland.—Generally fine and clear with light S.W. to S.E. winds, sea moderate. Cloudy at Townsville. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne W.N.W., dull, temperature 46°; Cape Otway E.N.E., 8, fine, rough sea, temperature 54°; Portland, E., 8, fine, smooth sea, temperature, 53°; Wilson's Promontory, NE., 13, fine but cloudy, moderate sea; temperature 54°.

New South Wales.—Albury, calm, fine, temperature 58°; Clarence River, S.E., 28, fine, smooth sea, temperature 65°; Deniliquin, calm, fine, temperature 52; Dubbo, calm, fine, temperature 55°; Eden, S.E., 14, cloudy, smooth sea, temperature 58°; Forbes, S.W., fine, temperature 55°; Goulburn, S.E., 14, showery, temperature 57°; Menindie, S., 28, fine, temperature 55°; Moruya, S., 28, clearing, moderate sea, temperature 56; Newcastle, S., 14, cloudy, smooth sea, temperature 69°; Port Macquarie, S., 28, fine, smooth sea, temperature 65°; Sydney, W.S.W., 8, raining, smooth sea, temperature 53°; Wentworth, calm, fine, temperature 50°.

Sydney.—Rain from 9 a.m. to 9 p.m. Wednesday, 2·240 inches.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 6 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 4 feet above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 11 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 23.

Sun rises at 7, sets at 5.12; Moon, 2.28 p.m., 3.15 a.m.; Mercury, 8.17 a.m., 6.59 p.m.; Venus, 8.16 a.m., 6.51 p.m.; Mars, 4.35 a.m., 2.23 p.m.; Jupiter, 8.59 a.m., 8.8 p.m.; Saturn, 5.5 a.m., 2.59 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 5.6 a.m., 5.37 p.m.

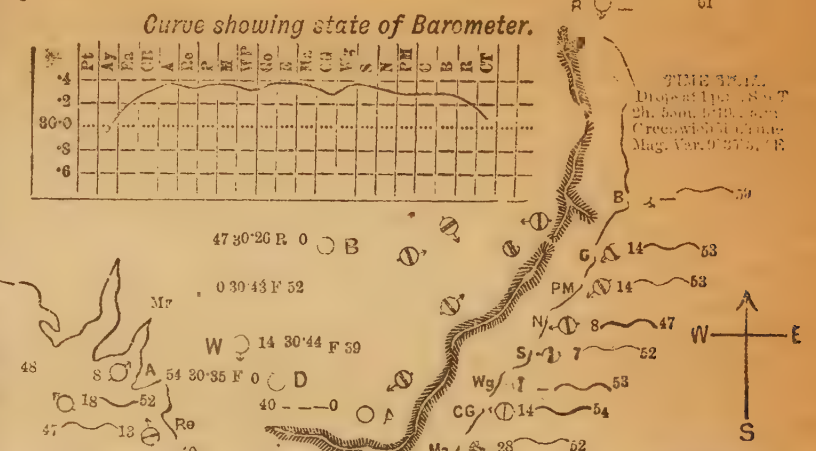
METEOROLOGICAL REPORTS AND MAP FOR JULY 23, 1885.

Stations	W.T.	Mx	Mn	R'in
Albury ..	b	73	44	0
Armidale	u	58	43	0·10
Balranald	b	75	64	0
Bathurst ..	f	59	33	0
Bend'meer	u	55	43	0·17
Bodalla ..	p	60	43	0·14
Bourke ..	b	64	39	0
Camd'n H.	c	62	49	0
C. St. Geo.	c	61	51	1·32
Carcoar ..	b	50	37	0
Casino	b	73	44	0
Cassilis ..	r	55	43	0·15
Clarence ..	c	70	51	0
Condob'lin	c	46	32	0
Cooma	c	53	35	0·02
Coonab'n.	c	63	33	0·17
Coonamble	b	—	—	0
Cowra	b	59	54	0
Deniliquin	b	67	33	0
Dubbo ..	b	65	34	0
Eden	c	57	50	0·21
Euston ..	b	72	29	0
Forbes....	b	—	40	0
Glen Innes	u	49	31	0·30
Goulburn	p	60	41	0·21
Grafton ..	u	75	53	0
Gunnedah	c	58	46	0·11
Hay	b	66	41	0
Hill End	f	—	—	0
Inverell ..	u	52	35	0·59
Kiandra ..	n	39	27	0
Lismore ..	c	69	50	0·04
Maitland ..	c	53	46	0
Marsdens	b	66	46	0
Menindie	b	61	37	0
Molong ..	b	60	34	0
Moree	g	63	41	0·52
Moruya ..	r	60	47	0·37
Moss Vale	f	46	43	1·50
M. Victoria	c	49	38	6·25
Mudgee ..	u	72	30	0
Murrumbh	–	—	—	–
Murr'r'ndi.	p	55	43	0·08
Mus'lbrook	u	61	39	0
Narrabri ..	u	62	32	0
Newcastle	g	61	45	0
Nowra	–	—	—	—
Orange ..	c	52	37	0·04
Picton	c	53	48	0·54
P.M'quarie	c	65	49	0
P.Stephens	g	69	41	0
Qu'nbeyan	g	53	42	0·02
Quirindi ..	p	65	45	0·12
Singleton	g	61	42	0
Sydney ..	c	57	49	2·25
Tamworth	u	63	41	0·10
Taralga ..	r	61	32	1·30
Taree	c	65	46	0·01
T'nt'rfield	u	58	43	0·10
Wagga....	u	59	38	0
Walcha ..	c	53	34	0·18
Walgett ..	b	—	34	0
Wentw'rth	b	64	35	0
Wilcannia	b	—	—	0
Woll'ng'ng	g	59	40	1·15
Young ..	c	65	40	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·22
Average for 26 years from Jan. 1st to June 30 .... 31·26
Total Rainfall from January 1st to July 23 .. .. 31·76
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E. — T. storm, wind S. — Rain, wind W. — If it is calm, the symbol is used without the arrow. — Smooth sea. — Heavy sea. — Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b landing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Pa, Port Darwin; CB, Cape Borda; A, Adelaide; Ro, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; E, Emu Creek; Ca, Cape Capricorn; Ct, Cooktown; Menindi, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Acco Station. The barometer curve enables one at a glance to trace the depressions, bringing Westerly winds in advance, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy and unsettled, with light westerly and northerly winds and smooth sea. No rain.

South Australia reports weather generally fine and clear, few light scattered clouds in parts; winds light from N.E. to N.W., and calm, smooth sea and steady barometers on south coast. No rain.

Victoria.—Foggy on coast, winds light from north, and calm; sea smooth, barometers falling; southerly wind, with fine, clear weather inland at Echuca; hoar frost at night at Omeo. No rain.

Tasmania.—Dull and misty on north coast; wind light from S.E.

New Zealand.—Generally fine and clear; barometers 30·10; winds light from S.W.

New South Wales.—Generally cloudy on and near coast; heavy rain in night on coast and mountains, from Sydney southwards, Mount Victoria reporting 6·25 inches. Fine and calm inland. Details in map above. Smooth sea and light westerly winds on coast. Nowra, maximum 58, minimum 52, rain 1·25; Camden, weather fine and warm, rain 0·75; Gundaroo, fine and calm, rainfall 0·47.

Queensland.—Generally fine on E. coast, with moderate sea and light S.E. winds. Dull at Cooktown. Rainfall: Brisbane, 0·01; Cape Moreton, 0·11.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne S.S.W., 8, fine and clear, temperature 52°; Cape Otway W.N.W., 8, fine and clear, slight sea, temperature 60°; Portland, N.W., sky half clouded, smooth sea, temperature. 57°; Wilson's Promontory, S.W., 23, fine, but cloudy, moderate sea, temperature 49°.

New South Wales.—Albury, W., 10, fine clear, temperature 56°; Cape St. George, S., 15, showery, moderate sea, temperature 58°; Eden, calm, fine, smooth sea, temperature 58°; Forbes, calm, fine, temperature 66°; Goulburn, calm, raining, temperature 58°; Menindie, calm, fine, temperature 56°; Moruya, S., 28, fine, moderate sea, temperature 60°; Newcastle, calm, dull, smooth sea, temperature 59°; Port Macquarie, S., 28, cloudy, smooth sea, temperature 65°; Sydney, W., 3, cloudy, smooth sea, temperature 60°; Wentworth, N.W., fine, temperature 56°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 3 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 3 feet 4 inches above summer level. Murray: At Albury, 1 foot 3 inches above summer level; at Euston, 9 feet 6 inches above summer level. Darling: At Wentworth, 8 feet above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

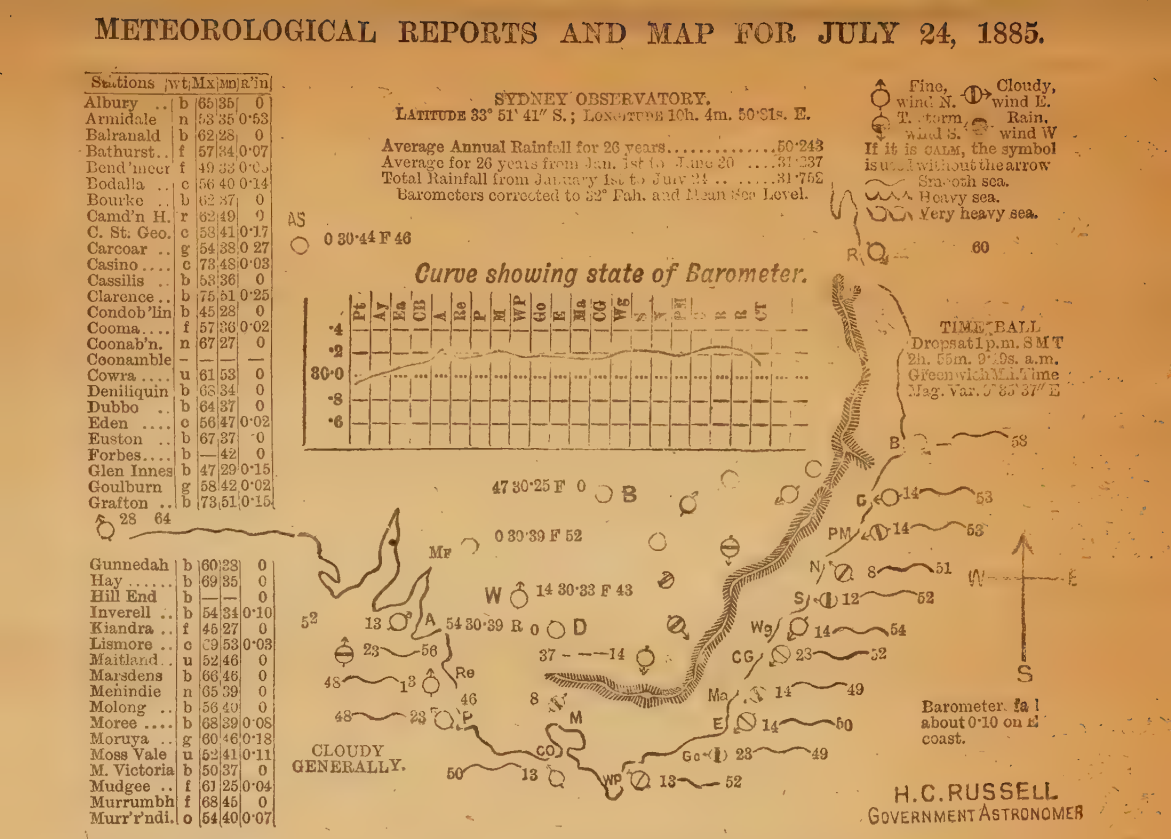
ASTRONOMICAL MEMORANDA FOR JULY 24.

Sun rises at 6·59, sets at 5.13; Moon, 3.14 p.m., 4.6 a.m.; Mercury, 8.18 a.m., 7.3 p.m.; Venus, 8.16 a.m., 6.53 p.m.; Mars, 4.34 a.m., 2.22 p.m.; Jupiter, 8.56 a.m., 8.5 p.m.; Saturn, 5.2 a.m., 2.56 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 6.8 a.m., 5.33 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 24, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	65	35	0
Armidale	n	53	35	0·53
Balranald	b	62	28	0
Bathurst..	f	57	34	0·07
Bend'meer	f	49	33	0·05
Bodalla ..	c	56	40	0·14
Bourke ..	b	62	37	0
Camd'n H.	r	62	49	0
C. St. Geo.	c	58	41	0·17
Carcoar ..	g	54	38	0·27
Casino	c	73	48	0·03
Cassilis ..	b	58	36	0
Clarence ..	b	75	51	0·25
Condob'lin	b	45	28	0
Cooma	f	57	36	0·02
Coonab'n.	n	67	27	0
Coonamble	–	—	—	—
Cowra	u	61	53	0
Deniliquin	b	63	34	0
Dubbo ..	b	64	37	0
Eden	c	56	47	0·02
Euston ..	b	67	37	0
Forbes....	b	—	42	0
Glen Innes	b	47	29	0·15
Goulburn	g	58	42	0·02
Grafton ..	b	73	51	0·15
Gunnedah	b	60	28	0
Hay	b	69	35	0
Hill End	b	—	—	0
Inverell ..	b	54	34	0·10
Kiandra ..	f	45	27	0
Lismore ..	c	69	53	0·03
Maitland..	u	52	46	0
Marsdens	b	66	46	0
Menindie	n	65	39	0
Molong ..	b	56	40	0
Moree	b	68	39	0·08
Moruya ..	g	60	46	0·18
Moss Vale	u	52	41	0·11
M. Victoria	b	50	37	0
Mudgee ..	f	61	25	0·04
Murrumbh	f	68	45	0
Murr'r'ndi.	o	54	40	0·07
Mus'lbrook	c	61	33	0
Narrabri..	b	62	34	0·09
Newcastle	g	61	47	0
Nowra	c	62	48	0
Orange ..	c	51	33	0
Picton	b	59	47	0·01
P.M'quarie	u	66	49	0·28
P.Stephens	r	65	51	0·40
Qu'nbeyan	c	54	43	0·06
Quirindi ..	b	62	45	0·10
Singleton	u	53	46	0
SYDNEY ..	g	61	50	0·01
Tamworth	b	56	35	0
Taralga ..	g	66	27	0
Taree	r	64	49	0·62
T'nt'rfield	b	57	42	0·16
Wagga....	b	64	36	0
Walcha ..	b	51	35	0·62
Walgett ..	b	—	34	0
Wentw'rth	b	70	35	0
Wilcannia	b	—	—	0
Woll'ng'ng	c	62	48	0·03
Young ..	f	76	43	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.; b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of the barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mt. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one to see the direction of the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia. — Cloudy, with light N.W. winds and smooth sea. Rainfall: Perth, 0·24; Esperance Bay, 0·04.

South Australia reports weather generally fine and clear. Cloudy between Cape Borda and Fowler's Bay. Winds fresh from N.E. and N.W., strong in places on coast. Moderate sea and falling barometers on coast. No rain.

Victoria.—Generally fine; scattered clouds in places on coast; sea smooth, barometers falling, wind light from N.W. Fine and clear, with light S. wind inland at Echuca, and fine and calm at Omeo. Rainfall: Lakes Entrance, 0·01.

Tasmania.—Cloudy and dull, with strong N.W. wind. No rain.

New Zealand.—Russell: barometer, 30·40; wind calm, showery. Wellington: barometer, 30·30; wind N.W., fine and clear. Bluff: barometer, 30·10; wind W., fine and clear.

New South Wales.—Cloudy on coast but clearing; sea smooth and moderate. Barometers falling. Wind light from S.W.; fine and calm inland, foggy in places, frosty on highlands. Details in map above. Gundaroo reports heavy fog at 9 a.m. Rainfall 0·15.

Queensland.—Generally fine and clear on east coast; sea moderate; wind S.E. Rainfall, Cape Moreton, 0·29.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, temperature 56°; Cape St. George, S., 42, cloudy, smooth sea, temperature 59°; Clarence River, S.E., fine, smooth sea, temperature 64°; Deniliquin, calm, fine, temperature 58°; Dubbo, S.W., 14, fine, temperature 56; Eden, S.W., 14, fine, temperature [illegible]; Forbes, calm, fine, temperature 60°; Goulburn, calm, fine, temperature 55°; Menindie, S. 14, fine, temperature 58°; Moruya, [illegible], 12, fine, smooth sea, temperature 59°; Newcastle, W., 14, fine, smooth sea, temperature 66°; Port Macquarie, W.S.W., 14, showery, smooth sea, temperature 63°; Sydney, W.S.W., 8, scattered clouds, smooth sea, temperature 60°; Wentworth, calm, fine, temperature 52°.

Victoria.—Melbourne N., 13, fine, temperature 60°; Cape Otway, N.N.W., 8, fine but cloudy, slight sea; Portland, N.N.W., 28, fine, smooth sea, temperature, 59°; Wilson's Promontory, N., 13, fine but cloudy, smooth sea, temperature 59°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 2 inches above summer level; at Hay, 1 feet 11 inches above summer level; at Balranald, 2 feet 9 inches above summer level. Murray: At Albury, 1 foot 3 inches above summer level; at Euston, 9 feet 6 inches above summer level. Darling: At Wentworth, 7 feet 11 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 25.

Sun rises at 6·59, sets at 5.14; Moon, 4.4 p.m., 4.54 a.m.; Mercury, 8.18 a.m., 7.6 p.m.; Venus, 8.16 a.m., 6.55 p.m.; Mars, 4.33 a.m., 2.21 p.m.; Jupiter, 8.52 a.m., 8.2 p.m.; Saturn, 4.58 a.m., 2.52 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 3.58 a.m., 7.20 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 25, 1885.

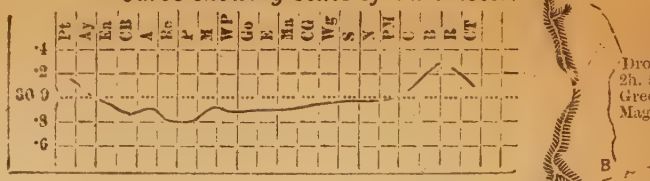
Stations	wt	Mx	Mn	r'in
Albury ..	f	63	36	0
Armidale	n	59	38	0
Balranald	b	77	38	0
Bathurst ..	g	55	33	0
Bend'meer	n	51	32	0
Bodalla ..	c	66	29	0
Bourke ..	b	76	37	0
Camd'n H.	b	60	48	0
C. St. Geo.	b	60	43	0·09
Carcoar ..	n	50	35	0
Casino	b	72	37	0
Cassilis .	b	51	38	0
Clarence ..	b	71	47	0
Condob'lin	b	45	28	0
Cooma ...	n	64	23	0
Coonab'n.	n	70	26	0
Coonamble	–	—	—	—
Cowra	f	59	50	0
Deniliquin	b	61	35	0
Dubbo ..	b	65	29	0
Eden	–	—	—	—
Euston ..	c	74	35	0
Forbes....	b	—	34	0
Glen Innes	f	53	30	0
Goulburn	b	59	52	0
Grafton ..	b	71	48	0
Gunnedah	b	62	37	0
Hay	b	69	38	0
Hill End	b	—	—	0
Inverell ..	b	53	21	0
Kiandra ..	n	50	28	0
Lismore ..	b	71	41	0
Maitland..	b	52	47	0
Marsdens	b	66	42	0
Menindie	b	68	40	0
Molong ..	b	62	34	0
Moree	b	69	35	0
Moruya ..	b	63	35	0
Moss Vale	b	52	38	0
M. Victoria	b	54	38	0
Mudgee ..	f	68	23	0
Murrumbh	b	69	36	0
Murr'r'ndi.	b	55	41	0
Mus'lbrook	b	65	34	0
Narrabri ..	b	60	33	0
Newcastle	b	62	48	0
Nowra	b	64	41	0
Orange ..	b	51	28	0
Picton	b	61	41	0
P.M'quarie	b	63	44	0
P.Stephens	b	78	48	0·05
Qu'nbeyan	f	56	36	0
Quirindi ..	b	61	42	0
Singleton	b	62	51	0
SYDNEY ..	b	62	46	0
Tamworth	c	60	47	0
Taralga ..	b	66	28	0
Tareo	b	63	43	0·16
T'nt'rfield	n	56	31	0
Wagga....	b	59	32	0
Walcha ..	n	50	32	0
Walgett ..	b	—	35	0
Wentw'rth	b	71	41	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	64	49	0
Young ..	n	78	33	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 25 .. ..31·753
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



TIME BALL
Drops at 1 p.m. S M T
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E.

Barometers fallen about 0·18 on S coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fine and no clouds in the sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; v, threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy and showery, with fresh westerly winds on S. coast, and calm on W. at Perth. Sea moderate. Rainfall: Perth, 0·11; Esperance Bay, 0·32.

South Australia reports weather generally dull S. of Port Wakefield, and scattered clouds to Port Augusta, thence northwards fine and calm, smooth sea, falling barometer, and light to fresh N.E. and N.W. winds. Raining at Borda. Rainfall: M'Donnell Bay, 0·01; Cape Borda, 0·14.

Victoria.—Generally cloudy, with light N.W. and northerly winds. Smooth sea and falling barometers on coast. Northerly squalls at Wilson's Promontory. Hoar frost in night of 24th at Omeo. Fine and clear with light N. wind at Echuca. Rainfall: Melbourne, 0·01.

Tasmania.—Dull and showery on N. coast, with strong N. winds. Rainfall: Low Heads, 0·05.

New Zealand.—Russell: barometer, 30·40; wind calm, fine. Wellington: barometer, 30·30; wind N.W., fine. Bluff: barometer, 30·20; wind W., fine.

New South Wales.—Generally fine and clear, with light westerly winds and calms; frosty on the highlands, foggy in places; details in map above; smooth sea, falling barometers, and high westerly winds and calms.

Queensland.—Generally fine and clear on east coast, with S.E. and S.W. winds and moderate sea; dull at Cooktown, no rain.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., fine, temperature 54°; Cape St. George, W., 42, fine, smooth sea, temperature 60°; Clarence River, S.E., 10, fine, smooth sea, temperature 66°; Deniliquin, calm, fine, temperature 60°; Dubbo, N.W., 28, fine, temperature 57; Eden, N.E., 14, fine, smooth sea, temperature 58°; Forbes, calm, fine, temperature 55°; Goulburn, N.W., 10, fine, temperature 58°; Menindie, N., 40, fine, clear, temperature 57°; Moruya, N.W., 28, fine, smooth sea, temperature 68°; Newcastle, W., 10, fine, smooth sea, temperature 65°; Sydney, W., 10, fine, clear, smooth sea, temperature 64°; Wentworth, fine, clear, temperature 54°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 2 inches above summer level; at Hay, 1 foot 10 inches above summer level; at Balranald, 3 feet 8 inches above summer level. Murray: At Albury, 10 inches above summer level; at Euston, 9 feet 4 inches above summer level. Darling: At Wentworth, 7 feet 11 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 27.

Sun rises at 6·57, sets at 5.15; Moon, 5.46 p.m., 6.22 a.m.; Mercury, 8.18 a.m., 7.12 p.m.; Venus, 8.15 a.m., 6.59 p.m.; Mars, 4.31 a.m., 2.19 p.m.; Jupiter, 8.45 a.m., 7.56 p.m.; Saturn, 4.51 a.m., 2.45 p.m. New moon, 12th; full moon, 27th.

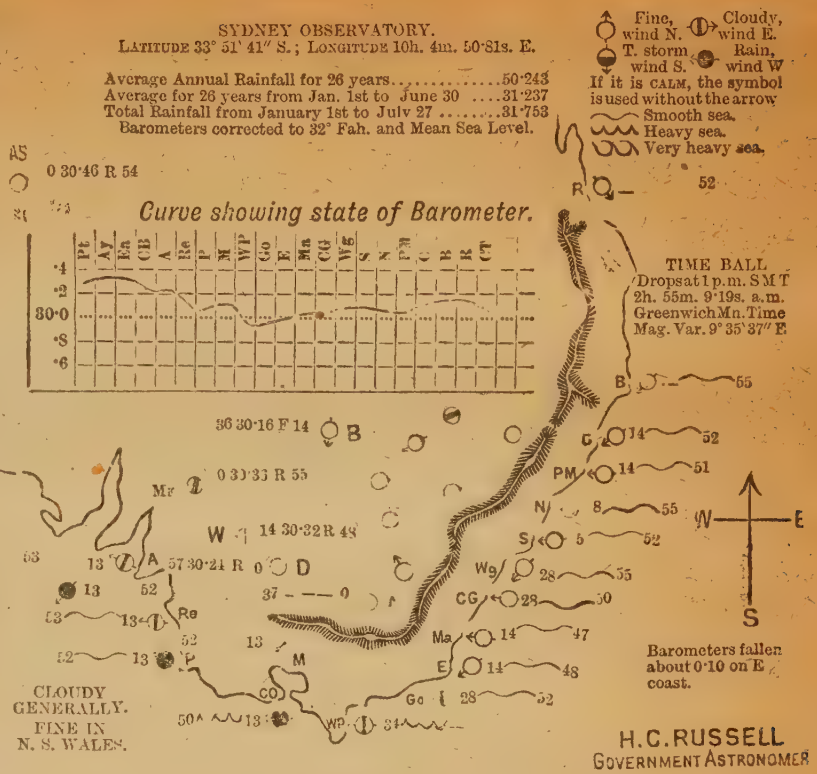
High water at Port Denison: 8.20 a.m., 8.39 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 27, 1885.

Stations	wt	Mx	m	R'in.
Albury ..	f	63	31	0·51
Armidale	b	62	25	0
Balranald	d	71	36	0
Bathurst..	b	60	32	0·02
Bend'meer	n	52	27	0
Bodalla ..	b	71	29	0
Bourke ..	b	79	37	0
Camd'n H.	b	69	44	0
C. St. Geo.	b	64	46	0
Carcoar ..	b	50	38	0·08
Casino	b	78	31	0
Cassilis ..	b	57	37	0
Clarence ..	b	73	47	0
Condob'lin	b	45	30	0
Cooma	n	56	23	0
Coonab'n.	n	66	27	0
Coonamble	b	—	—	0
Cowra	b	51	46	0
Deniliquin	b	66	38	0
Dubbo ..	b	62	27	0
Eden	b	62	46	0
Euston ..	d	62	38	0
Forbes....	b	—	34	0
Glen Innes	n	60	27	0
Goulburn	b	51	34	0·07
Grafton ..	b	81	41	0
Gunnedah	b	66	37	0
Hay	b	66	37	0
Hill End	u	—	—	0·04
Inverell ..	n	55	25	0
Kiandra ..	n	37	29	4·88
Lismore ..	b	77	34	0
Maitland..	b	51	44	0
Marsdens	n	66	43	0
Menindie	c	66	42	0
Molong ..	b	64	34	0
Moree	b	74	40	0
Moruya ..	b	65	40	0
Moss Vale	n	49	37	0
M. Victoria	b	51	39	0
Mudgee ..	n	65	23	0·03
Murrumbh	b	57	39	0 08
Murr'r'ndi.	b	60	40	0
Mus'lbrook	b	69	36	0
Narrabri..	b	64	34	0
Newcastle	b	70	47	0
Nowra	b	60	44	0
Orange ..	c	47	37	0·04
Picton	b	59	45	0
P.M'quarie	b	71	42	0
P.Stephens	b	79	45	0·05
Qu'nbeyan	n	54	35	0
Quirindi ..	b	65	37	0
Singleton	b	60	50	0
SYDNEY ..	b	64	50	0
Tamworth	b	61	30	0
Taralga ..	b	61	22	0·10
Taree	b	70	43	0
T'nt'rfield	b	62	26	0
Wagga....	b	58	33	0·21
Walcha ..	n	56	29	0
Walgett ..	-	—	—	—
Wentw'rth	g	63	40	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	70	50	0
Young ..	n	65	33	0·10

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 27 .....31·753
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, fresty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M n the corresponding minimum temperature; r n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy in the southern parts, with light westerly winds and calms and very smooth sea. Fine in north; winds light from E. and S.E.; sea smooth. The barometers generally show a slight fall since 26th. Rainfall: Albany, 0·31; Esperance Bay, 0·24.

South Australia reports weather generally dull. Showery in parts inland to Quorn, and rain recorded in same districts, the heaviest falls being over the Mount Lofty Ranges, varying there from 0·70 to 1·00, and in the districts N. of Adelaide from 0·30 to 0·50. Light westerly and S.W. winds prevail, and on the coast the sea is reported moderate, and the barometers show a considerable rise. Cape Borda, at 9 a.m., reports passing showers. Fine clear weather in Northern Territory. Rainfall: Eucla, 0·02; Streaky Bay, 0·05; Cape Borda, 0·81; Adelaide, 0·27; Robe, 0·71.

Victoria generally cloudy, with light to moderate westerly winds. Rough sea, rising barometers, and light rain (in places) on coast. N.W. and dull at Echuca, fine at Omeo. Rainfall: Melbourne, 0·05; Portland, 0·47; Cape Otway, 0·05; and Wilson's 0·25.

Tasmania.—Fine on N. coast, strong W. wind, and rising barometer.

New Zealand.—Russell, barometer 30·20, wind N., light; Wellington, barometer 29·90, wind N.W., light; Bluff, barometer 29·60, wind S.W., light. Generally dull, showery on west coast.

New South Wales.—Generally fine and clear. Cloudy in southern and south-western parts. See details in map above. Smooth sea, very clear weather, light westerly wind and falling barometers on coast. Albury reports 0·51 of rain and dense fog at 9 a.m., and Kiandra 4·88 of thawed snow. Calm and frosts inland. Drizzling rain at Euston and Balranald. Gundaroo reports rain falling all 26th, measuring 0·19 on 27th, when weather had cleared.

Queensland.—Generally fine and clear, with S.W. and S.E. winds and moderate sea. Dull, with very smooth sea at Cooktown. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.N.W., 13, dull, temperature 55°; Cape Otway, W.N.W., 13, raining, foggy, rough sea, temperature 54°; Portland, W.N.W., 40, showery, smooth sea, temperature 55°; Wilson's Promontory, W.N.W., 34, raining, rough sea, temperature 50°.

New South Wales.—Albury, S.W., dull, like rain, temperature 52°; Cape St. George, N., 28, fine, smooth sea, temperature 62°; Clarence River, S.E., 14, fine, smooth sea, temperature 66°; Deniliquin, calm, dull, temperature 65°; Dubbo, N., fine, temperature 55; Eden, N.E., 14, fine, smooth sea, temperature 59°; Forbes, calm, fine, but cloudy, temperature 60°; Goulburn, calm, fine, temperature 57°; Menindie, W.S.W., 14, fine, temperature 57°; Moruya, N.E., 28, fine, smooth sea, temperature 54°; Newcastle, E., 14, fine, smooth sea, temperature 61°; Port Macquarie, S., 28, fine, smooth sea, temperature 65°; Sydney, W.N.W., 3, fine, smooth sea, temperature 62°; ; Wentworth, calm, dull, temperature. 52°.

Owing to an error in the telegram, the rain at Mount Victoria was on July 23 published as 6·25; it should have been 0·62.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 4 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 3 feet 6 inches above summer level. Murray: At Albury, 1 foot above summer level; at Euston, 9 feet 2 inches above summer level. Darling: At Wentworth, 7 feet 10 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 28.

Sun rises at 6·56, sets at 5.16; Moon, 6.40 p.m., 7.2 a.m.; Mercury, 8.18 a.m., 7.16 p.m.; Venus, 8.15 a.m., 7.1 p.m.; Mars, 4.30 a.m., 2.18 p.m.; Jupiter, 8.42 a.m., 7.52 p.m.; Saturn, 4.48 a.m., 2.42 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison: 8.57 a.m., 9.15 p.m.

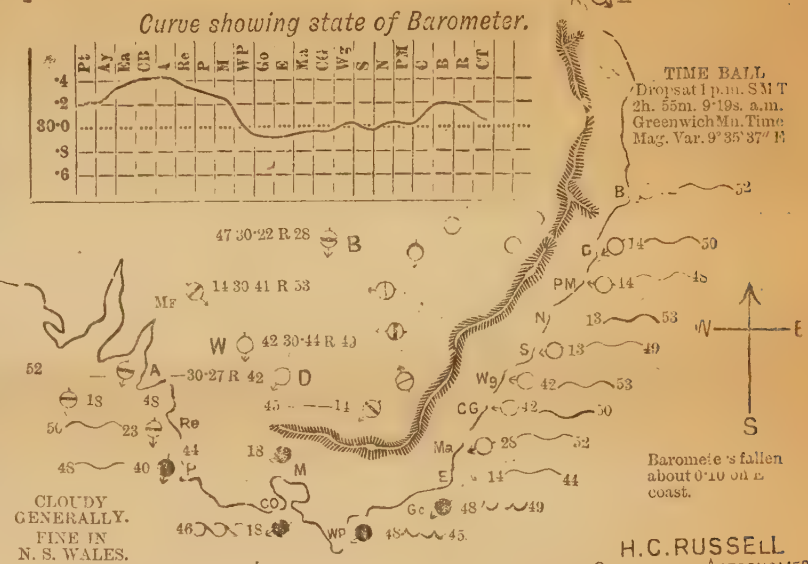
* Kiandra, 4·88 in rain column is thawed snow.

Stations	wt	Mx	Mn	R'in
Albury ..	c	56	38	0·12
Armidale	n	61	32	0
Balranald	b	59	40	0
Bathurst..	g	59	32	0
Bend'meer	n	58	23	0
Bodalla ..	b	68	28	0
Bourke ..	g	69	36	0
Camd'n H.	b	69	42	0
C. St. Geo.	b	64	43	0
Carcoar ..	g	54	—	0
Casino	b	76	36	0
Cassilis .	b	53	35	0
Clarence ..	b	75	47	0
Condob'lin	g	48	31	0
Cooma	n	63	31	0
Coonab'n.	n	63	23	0
Coonamble	b	—	—	0
Cowra	c	54	45	0
Deniliquin	b	55	42	0
Dubbo ..	b	65	25	0
Eden	u	59	42	0
Euston ..	b	61	43	0
Forbes....	b	—	34	0
Glen Innes	n	62	26	0
Goulburn	g	—	36	0
Grafton ..	b	79	30	0
Gunnedah	b	66	34	0
Hay	b	50	47	0
Hill End	u	—	—	0
Inverell ..	b	59	21	0
Kiandra ..	–	—	—	—
Lismore ..	–	—	—	—
Maitland..	b	50	41	0
Marsdens	c	61	44	0
Menindie	c	60	41	0
Molong ..	b	61	35	0
Moree	b	72	33	0
Moruya ..	b	64	41	0
Moss Vale	c	52	36	0
M. Victoria	b	52	33	0
Mudgee ..	b	72	23	0
Murrumbh	r	66	41	0
Murr'r'ndi.	b	55	35	0
Mus'lbrook	c	63	33	0
Narrabri ..	b	62	33	0
Newcastle	b	65	45	0
Nowra	–	—	—	—
Orange ..	g	50	29	0
Picton	b	60	40	0
P.M'quarie	b	65	42	0
P.Stephens	–	—	—	—
Qu'nbeyan	g	58	36	0
Quirindi ..	n	66	35	0
Singleton	b	62	44	0
SYDNEY ..	b	63	44	0
Tamworth	b	62	27	0
Taralga ..	u	69	51	0
Taree	b	66	40	0
T'nt'rfield	b	63	27	0
Wagga....	b	58	33	0·03
Walcha ..	n	58	28	0
Walgett ..	b	—	39	0
Wentw'rth	b	58	46	0
Wilcannia	c	—	—	0
Woll'ng ng	b	69	48	0
Young ..	u	77	34	0·01

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 .....31·237
Total Rainfall from January 1st to July 28 .. ..31·754
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W. If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, blending or broken; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn, the corresponding minimum temperature; r'in, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with a bar means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf, Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, with light easterly wind and calms; sea smooth; no rain.

South Australia reports weather dull inland to Hawker. Light rain recorded inland to Melrose, heaviest (about 0·30) over Mount Lofty Ranges; winds variable from S.W. to S.E., and light to moderate in force; moderate sea, rising barometers, and light southerly winds on coast; light rain falling at Port Augusta; fine and clear, with light S.E. winds and calms, in Central Australia and Northern Territory. Rainfall: Cape Borda, 0·03; Adelaide, 0·10; Robe, 0·07; M'Donnell Bay, 0·17.

Victoria.—Cloudy and showery round coast, with strong S.W. winds; rising barometers and rough sea on coast; sea very high at Cape Otway; strong west wind, with clear weather, inland at Echuca; squally on coast. Rainfall: Omeo, 0·20; Echuca, 0·11; Melbourne, 0·11; Portland, 0·37; Wilson's Promontory, 0·35; Cape Otway, 0·19; Lake Entrance, 0·15.

Tasmania.—Fine and clear on N. coast, with fresh S.W. wind.

New Zealand.—Russell, barometer 29·70, wind calm, weather fine and clear; Wellington, barometer 29·80, wind N.E., raining lightly; Bluff, barometer 29·80, wind N., weather fine and clear.

New South Wales.—Generally fine and clear, with light to fresh S.W. winds and calms. Cloudy in places in S. and S.W. Smooth sea, falling barometers, fresh westerly winds, and fine clear weather on coast. Rising barometers and fresh S.W. winds and calms inland. Raining at Murrumburrah. Very severe frost at Quirindi. Cold and windy on mountains at Mount Victoria. Temora reports 0·09 rain measured, and still falling at 9 a.m. For details see weather map above.

Queensland.—Fine and clear, with light S.E. to S.W. winds, and smooth sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 18, showery, squally, temperature 51°; Portland, S., 34½, cloudy, squally, rather rough sea, temperature 51°; Wilson's Promontory, S.W., 40½, cloudy, squally, high sea, temperature 47°.

New South Wales.—Albury, S.W., fine, temperature 52°; Cape St. George, S., 56, raining, gale, rising sea, temperature 46°; Clarence River, N.W., 28, fine, moderate sea, temperature 68°; Deniliquin, calm, fine, temperature 56°; Dubbo, W.S.W., 14, fine, temperature 53°; Eden, W.S.W., 28, fine, smooth sea, temperature 50°; Forbes, S.E., 28, dull, temperature 50°; Goulburn, W.N.W., dull, temperature 53°; Menindie, S., 28, fine, temperature 57°; Moruya, S.W., 43, fine, moderate sea, temperature 54°; Newcastle, W., 8, fine, smooth sea, temperature 63°; Port Macquarie, S.S.E., 28, fine, smooth sea, temperature 65°; Sydney, S., 34, dull, southerly gale, smooth sea, temperature 52°; Wentworth, S., 14, fine, temperature, 50°.

STATE OF RIVERS.

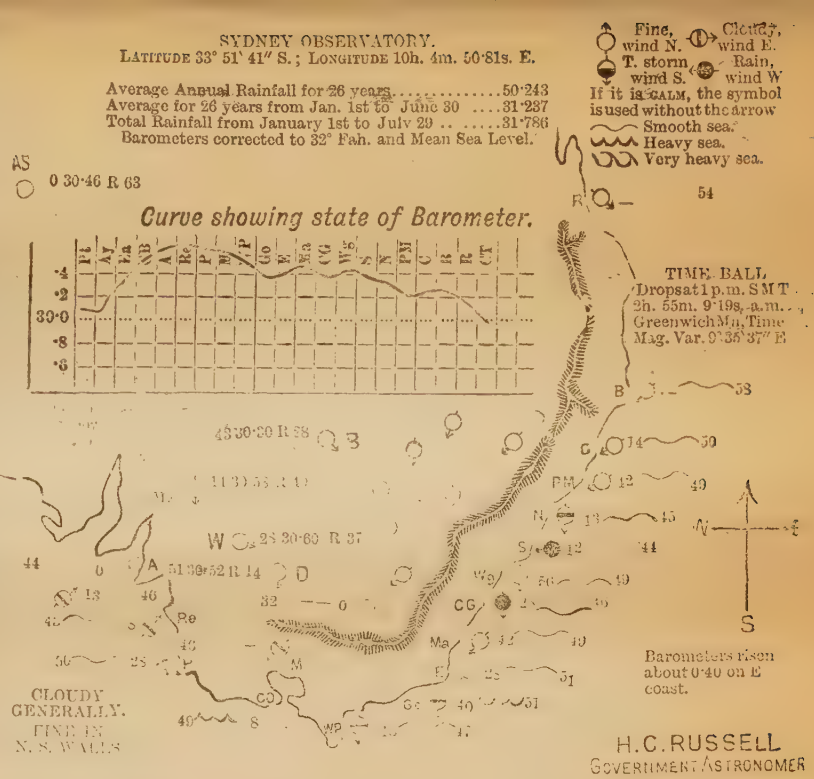
Murrumbidgee: At Wagga, 2 feet 5 inches above summer level; at Hay, 1 foot 9 inches above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, 1 foot 3 inches above summer level; at Euston, 9 feet 1 inch above summer level. Darling: At Wentworth, 7 feet 9 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 29.

Sun rises at 6.56, sets at 5.16; Moon, 7.33 p.m., 7.40 a.m.; Mercury, 8.17 a.m., 7.18 p.m.; Venus, 8.15 a.m., 7.3 p.m.; Mars, 4.30 a.m., 2.17 p.m.; Jupiter, 8.39 a.m., 7.49 p.m.; Saturn, 4.45 a.m., 2.39 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 29: 9.33 a.m., 9.15 p.m.

Stations	wt	Mx	mn	R'in
Albury ..	n	60	29	0
Armidale	b	56	31	0
Balranald	b	62	28	0
Bathurst..	b	49	22	0
Bend'meer	c	53	29	0
Bodalla ..	b	59	37	0
Bourke ..	c	64	33	0
Camd'n H.	c	63	48	0
C. St. Geo.	p	54	43	0·07
Carcoar ..	n	47	33	0
Casino	b	77	30	0
Cassilis ..	n	52	29	0
Clarence ..	c	76	48	0
Condob'lin	b	40	24	0
Cooma	c	46	28	0·08
Coonab'n.	b	58	29	0
Coonamble	b	—	—	0
Cowra	n	53	48	0
Deniliquin	b	57	30	0
Dubbo ..	b	63	27	0
Eden	c	51	35	0·03
Euston ..	b	61	27	0
Forbes	b	—	27	0
Glen Innes	b	55	30	0
Goulburn	b	49	25	0·07
Grafton ..	b	76	42	0
Gunnedah	b	58	37	0
Hay	b	56	32	0
Hill End	b	—	—	0
Inverell ..	b	59	21	0
Kiandra ..	c	38	20	0
Lismore ..	b	73	45	0
Maitland ..	p	47	40	0
Marsdens	n	56	37	0
Menindie	b	58	35	0
Molong ..	b	55	30	0
Moree	b	69	34	0
Moruya ..	c	89	40	0
Moss Vale	n	49	28	0
M. Victoria	b	45	29	0
Mudgee ..	n	64	21	0
Murrumbh	b	58	29	0·02
Murr'rndi.	b	54	30	0
Mus'lbrook	n	68	26	0
Narrabri ..	b	64	34	0
Newcastle	q	65	43	0·28
Nowra	b	58	37	0
Orange ..	b	45	28	0
Picton	b	58	38	0·01
P.M'quarie	c	64	46	0
P.Stephens	g	71	45	0·65
Qu'nbeyan	b	50	35	0
Quirindi ..	b	62	39	0
Singleton	b	60	40	0
SYDNEY ..	p	63	43	0·63
Tamworth	b	58	28	0
Taralga ..	n	50	27	0
Taree	g	67	45	0·01
T'nt'rfield	b	56	26	0
Wagga	n	55	26	0
Walcha ..	n	51	26	0
Walgett ..	c	—	36	0
Wentw'rth	b	57	32	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	66	44	0
Young ..	n	65	27	0·05



NOTES EXPLANATORY OF MAP.

In the list of stations [illegible] gives the state of the weather at 9 a.m., b [illegible] cloudy; h, hazy; [illegible] showing [illegible] rain; s, snow; t, thunder; [illegible] threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn is the corresponding minimum temperature, and R the rain for the previous 24 hours. The symbols used in the chart are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is blowing. A [illegible] circle with it means fine weather; a circle with bar, cloudy [illegible]; [illegible] spot raining. Next to this symbol are placed figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; A, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light easterly winds and calm and smooth sea.

South Australia reports weather generally fine and clear. Scattered clouds in places on coast. Winds light from S.E. to N.E. Barometers rising. Sea smooth. Light S.E. winds and calms in Northern Territory. No rain.

Victoria.—Generally cloudy, winds light from southerly. Sea moderate (high at Cape Otway). Barometers rising. Echuca reports fine clear weather with fresh S.W. winds. Omeo reports foggy weather and snow on hills. Foggy at Melbourne. Rainfall: Cape Otway, 0·05; Melbourne, 0·09.

Tasmania.—Fine clear weather on N. coast, with light S.E. wind.

New Zealand.—Russell, barometer 29·70, wind S.W., weather fine; Wellington, barometer 29·60, wind S.E., weather showery, rain 0·09; Bluff, barometer 29·80, wind S., weather dull.

New South Wales.—Generally fine and clear inland, cloudy unsettled weather on coast and mountains, with light rain falling in places. Smooth sea, rapidly rising barometers, and fresh S. wind on coast. Details in map. Cooma reports 1 inch of snow. Cootamundra reports 0·04 of rain, weather fine and frosty.

Queensland.—Generally fine and clear, with S.W. to S.E. winds and moderate sea on E. coast. No rain. Dull at Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.E., 8, cloudy, temperature 50°; Cape Otway, E.S.E., 8, dull, rough sea, temperature 53°; Portland, S.S.E., 18, dull, slight sea, temperature 52°; Wilson's Promontory, S., 8, fine, but cloudy, moderate sea, temperature 52°.

New South Wales.—Cape St. George, S., half cloudy, heavy sea, temperature 53°; Clarence River, S.W., strong, heavy sea; Deniliquin, S., 14, fine, temperature 60°; Forbes, calm, fine, temperature 50°; Goulburn, S.E., fine, temperature 51°; Menindie, S., 28, fine, temperature 54°; Moruya, S., 42, moderate sea, temperature 53°; Newcastle, S., strong, stormy, rising sea, temperature 57°; Port Macquarie, S.S.W., 56, squally, moderate sea, temperature 61°; Sydney, S., 28, showery, smooth sea, temperature 52°; Wentworth, calm, fine, temperature 51°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 4 inches above summer level; at Balranald, 2 feet 9 inches above summer level. Murray: At Albury, 1 foot 5 inches above summer level; at Euston, 9 feet above summer level. Darling: At Wentworth, 7 feet 8 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JULY 30.

Sun rises at 6.55, sets at 5.17; Moon, 8.29 p.m., 8.15 a.m.; Mercury, 8.16 a.m., 7.20 p.m.; Venus, 8.14 a.m., 7.5 p.m.; Mars, 4.29 a.m., 2.15 p.m.; Jupiter, 8.36 a.m., 7.46 p.m.; Saturn, 4.42 a.m., 2.36 p.m. New moon, 12th; full moon, 27th.

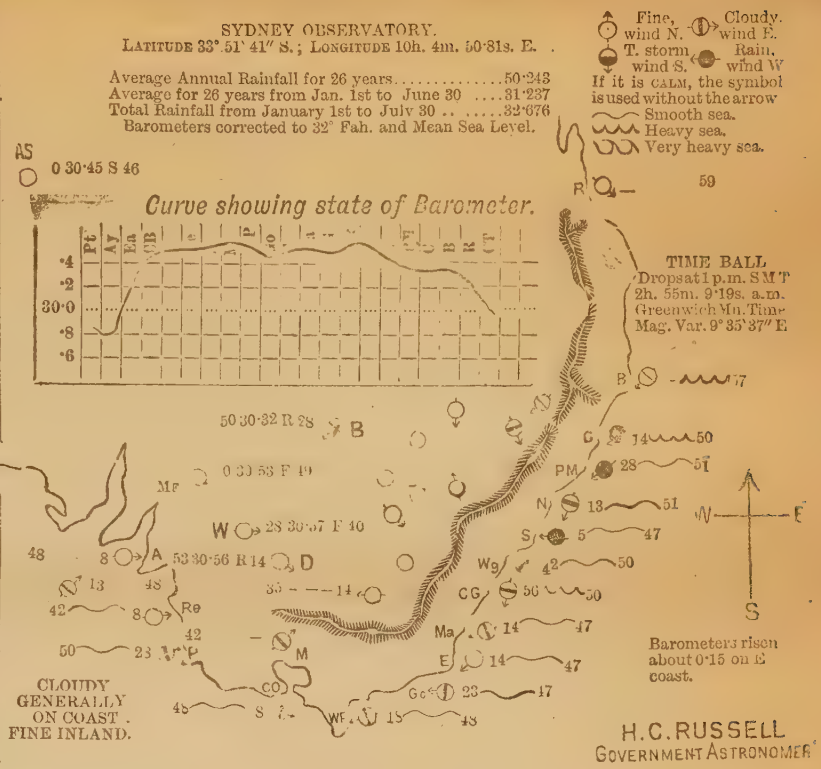
High water at Fort Denison, July 30: 10.6 a.m., 10.23 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 30, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	n	57	22	0
Armidale	u	48	38	0
Balranald	b	64	30	0
Bathurst..	g	52	30	0
Bend'meer	c	50	40	0
Bodalla ..	b	60	40	0
Bourke ..	b	69	41	0
Camd'n H.	u	65	50	0
C. St. Geo.	u	56	46	0·12
Carcoar ..	n	47	33	0
Casino	c	67	35	0
Cassilis ..	g	50	31	0
Clarence ..	r	73	48	0
Condob'lin	b	41	35	0
Cooma	n	48	25	0
Coonab'n.	b	58	27	0
Coonamble	b	—	—	0
Cowra	n	59	47	0
Deniliquin	b	61	32	0
Dubbo ..	b	59	26	0
Eden	c	55	46	0
Euston ..	b	61	32	0
Forbes....	b	—	40	0
Glen Innes	b	52	31	0
Goulburn	g	55	35	0
Grafton ..	b	69	45	0
Gunnedah	b	57	42	0
Hay	b	56	33	0
Hill End	b	—	—	0
Inverell ..	b	56	29	0
Kiandra ..	n	35	19	0
Lismore ..	u	72	45	0
Maitland ..	u	51	45	0
Marsdens	n	56	37	0
Menindie	c	55	35	0
Molong ..	n	60	30	0
Moree	b	70	38	0
Moruya ..	c	59	42	0
Moss Vale	r	44	34	0·08
M. Victoria	d	44	32	0·02
Mudgee ..	g	63	27	0
Murrumbh	c	62	30	0
Murr'r'ndi.	g	51	41	0
Mus'lbrook	c	64	29	0
Narrabri ..	b	63	34	0
Newcastle	c	58	45	0·72
Nowra	—	—	—	—
Orange ..	c	47	32	0
Picton	o	54	45	0
P.M'quarie	p	59	47	0·09
P.Stephens	c	72	44	0·10
Qu'nbeyan	b	48	36	0
Quirindi ..	b	61	44	0
Singleton	b	57	44	0
SYDNEY ..	p	53	44	0·89
Tamworth	b	59	32	0
Taralga ..	g	61	30	0
Taree	c	58	45	0·03
T'nt'rfield	u	57	27	0
Wagga....	g	55	35	0
Walcha ..	g	45	32	0
Walgett ..	b	—	40	0
Wentw'rth	n	60	33	0
Wilcannia	b	—	—	0
Woll'ng ng	c	61	46	0·10
Young ..	n	75	35	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 26 years from Jan. 1st to June 30 ....31·237
Total Rainfall from January 1st to July 30 .. ..32·676
Barometers corrected to 32° Fah. and Mean Sea Level.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for b.ue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River, B Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Showery on W. coast, with light N. and N.E. winds; fine on S. coast, winds N.W. and N.E., sea smooth. Rainfall: Carnarvon, 0·32; Geraldton, 0·05; Perth, 0·07.

South Australia reports weather generally fine and clear; hoar frosts and heavy dew in night; winds, S.E. to N.E.; fresh on coast, with moderate sea and steady barometers; light S.E. winds and calms, with fine weather, in Northern Territory and Central Australia. No rain.

Victoria.—Cloudy round coast, with light easterly winds and moderate sea, barometers steady; fine inland at Echuca, with fresh S.S.W. wind; foggy and hoar frost in night at Melbourne. Rainfall: Portland, 0·01.

Tasmania.—Fine and clear on N. coast, with fresh S.S.E. wind.

New Zealand.—Russell: Barometer 29·60, wind S.E., weather dull. Wellington: Barometer 29·70, wind S.E., weather fine and clear. Bluff: Barometer 29·80, wind N., weather fine and clear. Taranaki: Wind S.E., 40 miles per hour.

New South Wales.—Generally fine and clear inland, cloudy on coast, with rain in places. Sea moderate, barometers rising, wind fresh from S.S.W. Details in map. Drizzling rain at Mount Victoria. Raining north at Clarence River and Port Macquarie. Fine, calm, and frosty inland.

Queensland.—Generally fine and clear on east coast, with S.E. and S.W. winds and moderate sea. Dull at Cape Morton, with heavy sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 6, fine, temperature 50°; Cape Otway, S.E., 6, gloomy, misty, moderate sea, temperature 53°; Portland, E., 30, fine, smooth sea, temperature 53°; Wilson's Promontory, S.W., 24, squally, showery, smooth sea, temperature 50°.

New South Wales.—Albury, calm, fine, temperature 52°; Cape St. George, S., 42, cloudy, moderate sea, temperature 54°; Clarence River, S., 56, showery, moderately heavy sea, 59°; Dubbo, S.S.E., 14, fine, temperature 54°; Eden, S.W., 14, fine, slight sea, temperature 54°; Forbes, calm, fine and clear, temperature 59°; Goulburn, E.S.E., 14, dull, temperature 51°; Menindie, E., 28, fine, temperature 53°; Moruya, S.E., 28, fine, moderate sea, temperature 55°; Newcastle, S.S.E., 14, fine, temperature 57°; Port Macquarie, S.S.W., 42, showery, moderate sea, temperature 61°; Sydney, S.W., 13, cloudy, moderate sea, temperature 53°; Wentworth, S.E., fine, clear, temperature 48°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 7 inches above summer level; at Hay, 1 foot 6 inches above summer level; at Balranald, 2 feet 2 inches above summer level. Murray: At Albury, 1 foot 5 inches above summer level; at Euston, 8 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

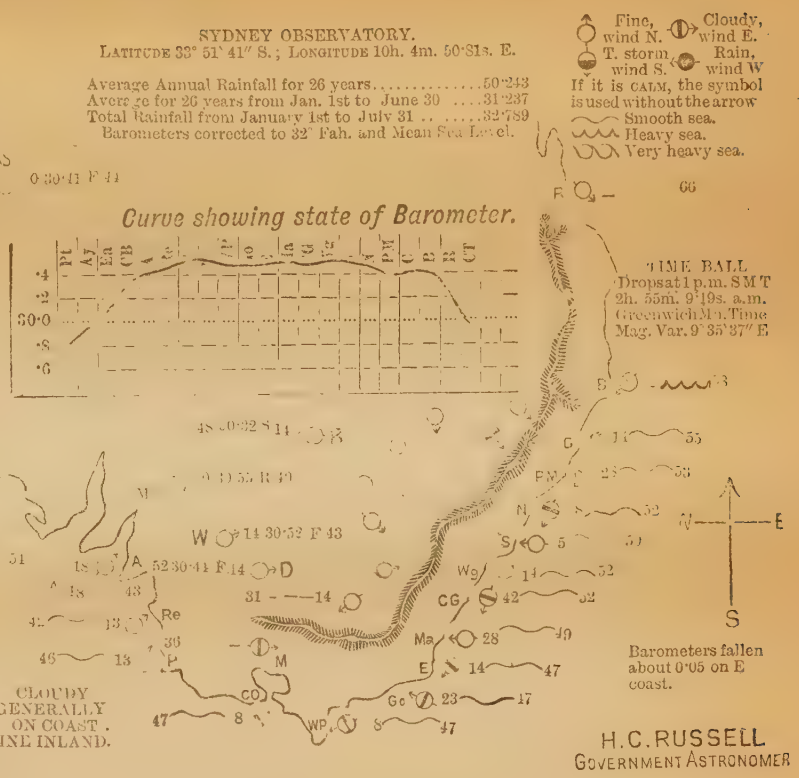
ASTRONOMICAL MEMORANDA FOR JULY 31.

Sun rises at 6.55, sets at 5.18; Moon, 9.24 p.m., 8.49 a.m.; Mercury, 8.15 a.m., 7.22 p.m.; Venus, 8.14 a.m., 7.7 p.m.; Mars, 4.29 a.m., 2.14 p.m.; Jupiter, 8.33 a.m., 7.43 p.m.; Saturn, 4.39 a.m., 2.33 p.m. New moon, 12th; full moon, 27th.

High water at Fort Denison, July 31: 10.40 a.m., 10.56 p.m.

METEOROLOGICAL REPORTS AND MAP FOR JULY 31, 1885.

Stations	wt	Mx	mn	r'n
Albury ..	b	40	33	0
Armidale	g	51	41	0·06
Balranald	b	69	31	0
Bathurst ..	b	58	28	0
Bend'meer	c	52	30	0
Bodalla ...	b	64	36	0
Bourke ..	c	60	40	0
Camd'n H.	c	64	48	0·75
C. St. Geo.	g	54	48	0
Carcoar ..	b	50	32	0
Casino	c	65	41	0
Cassilis ..	g	52	45	0
Clarence ..	p	71	48	0·31
Condob'lin	b	43	46	0
Cooma	g	57	22	0
Coonab'n.	n	60	30	0
Coonamble	g	—	—	0
Cowra	n	58	48	0
Deniliquin	b		32	0
Dubbo ..	b	63	33	0
Eden	g	55	45	0
Euston ..	b	63	35	0
Forbes....	b	—	35	0
Glen Innes	b	5	33	0
Goulburn	b	51	28	0
Grafton ..	c	69	47	0·02
Gunnedah	c	62	45	0
Hay	b	64	36	0
Hill End		—	—	0
Inverell ..	b	59	12	0
Kiandra ..	n	46	10	0
Lismore ..	c	64	50	0·04
Maitland ..	c	50	42	0·01
Marsdens	n	61	39	0
Menindie	b	60	40	0
Molong ..	b	59	33	0
Moree	b	72	43	0
Moruya ..	b	76	42	0
Moss Vale	b	45	35	0
M. Victoria	u	46	3	0·03
Mudgee ..	b	60	39	0
Murrumbih	b	62	31	0
Murr'r'ndi..	b	54	42	0
Mus'lbrook	o	60	38	0
Narrabri ..	b	68	37	0
Newcastle	g	58	48	0·06
Nowra	—	—	—	—
Orange ..	b	50	30	0
Picton	b	54	44	0
P.M'quarie	u	61	49	0·68
P.Stephens	g	71	47	0·06
Qu'nbeyan	n	51	33	0
Quirindi ..	b	59	40	0
Singleton	b	60	40	0
SYDNEY ..	c	55	47	0·11
Tamworth	b	61	34	0
Taralga ..	g	62	28	0
Taree	c	62	49	0·01
T'nt'rfield	u	58	41	0
Wagga....	b	57	30	0
Walcha ..	d	49	33	0
Walgett ..	b	—	44	0
Wentw'rth	b	64	34	0
Wilcannia	b	—	—	0
Woll'ng ng	b	62	48	0
Young ..	n	70	33	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b land ng for blue sky; a, clouded clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for the previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; A, Albany; SL, St. Lucia; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; W, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf. Inland the state of barometers at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy and unsettled; showery Perth; winds light from N.W.; sea smooth. Rainfall: Braldton, 0·58; Albany, 0·30.

South Australia.—Generally fine and clear, with light E. and E. winds; smooth sea, steady barometers, and light to moderate N.E. winds on coast; fine and clear inland and in Northern Territory, with S.E. winds and calms; squally from north at Darwin. No rain.

Victoria.—Cloudy on coast, with light N.E. to N.W. winds; steady barometers and moderate sea; dense fog at Melbourne; fine and clear inland at Echuca and Omeo. No rain.

Tasmania.—Fine and clear on north coast, with fresh S.E. wind.

New Zealand.—Russell: Barometer 29·70, wind S.W., light. Wellington: Barometer 29·50, wind S.E., dull. Bluff: Barometer [illegible], wind S.E. 23 miles, weather dull.

New South Wales.—Generally fine and clear inland, cloudy and unsettled on coast, with falling barometers; light to fresh E. and S.S.W. winds and smooth sea. Rain in places. (See in map above.) S.E. to S.W. winds and calms inland.

Queensland.—Generally cloudy on E. coast, with S.W. to S.E. winds and rough sea. Rainfall—C. Moreton, 0·55.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 8, fine, temperature 49°; Cape Otway, E., 8, fine, moderate sea, temperature 50°; Portland, S.E., 8, fine, smooth sea, temperature 53°; Wilson's Promontory, N.E., 13, fine, smooth sea, temperature 55°.

New South Wales.—Albury, calm, fine, temperature 52°; Cape St. George, S., 42, cloudy, moderate sea, temperature 56°; Clarence River, S., 28, unsettled, moderate sea, temperature 63°; Deniliquin, E., fine, temperature 56°; Dubbo, calm, fine, temperature 55°; Eden, S.W., 14, fine, smooth sea, temperature 58°; Goulburn, calm, fine, temperature 55°; Menindie, calm, fine, temperature 56°; Moruya, S.E., 28, fine, smooth sea, temperature 63°; Newcastle, S.W., 14, cloudy, moderate sea, temperature 56°; Port Macquarie, S., 42, cloudy, smooth sea, temperature 63°; Sydney, S., 10, fine, smooth sea, temperature 56°; Wentworth, calm, fine, temperature 52°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 9 inches above summer level; at Hay, 1 foot 6 inches above summer level; at Balranald, 2 feet 6 inches above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 8 feet 7 inches above summer level. Darling: At Wentworth, 7 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

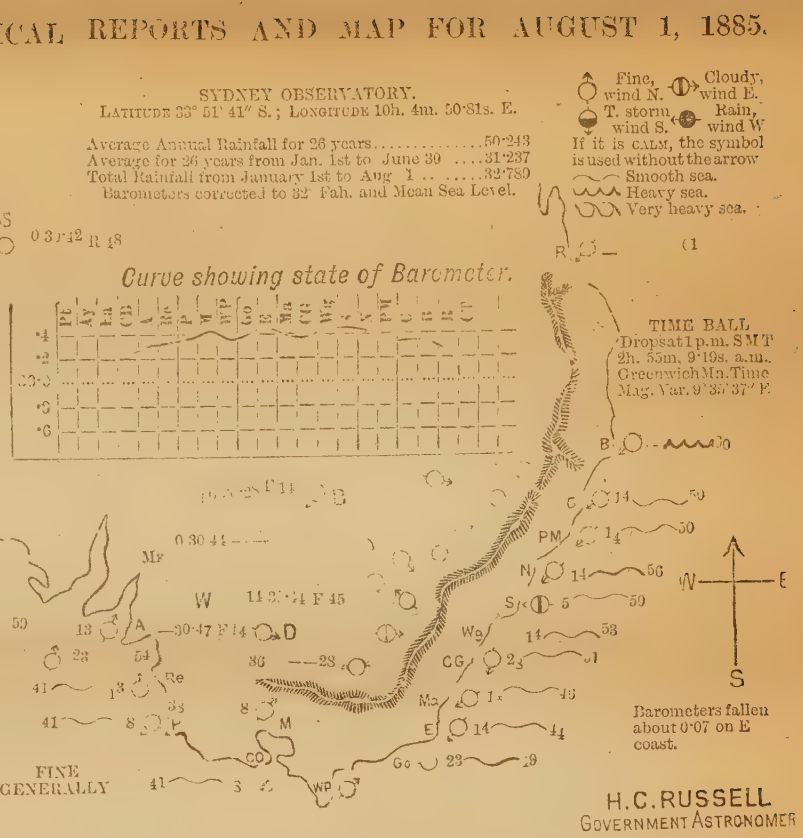
ASTRONOMICAL MEMORANDA FOR AUGUST 1.

Sun rises at 6.54, sets at 5.18; Moon, 10.21 p.m., 9.24 a.m.; Mercury, 8.13 a.m., 7.25 p.m.; Venus, 8.13 a.m., 7.9 p.m.; Mars, 4.28 a.m., 2.12 p.m.; Jupiter, 8.29 a.m., 7.41 p.m.; Saturn, 4.35 a.m., 2.29 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 1: 11.14 a.m., 11.33 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 1, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	n	62	33	0
Armidale	n	52	32	0
Balranald	b	80	30	0
Bathurst..	b	59	26	0
Bend'meer	n	51	24	0
Bodalla ..	b	65	30	0
Bourke ..	b	71	39	0
Camd'n H.	b	64	48	0
C. St. Geo.	b	58	47	0·05
Carcoar ..	n	50	34	0
Casino	b	69	35	0
Cassilis .	n	54	35	0
Clarence ..	b	67	46	0·20
Condob'lin	f	43	26	0
Cooma ...	n	53	19	0
Coonab'n.	b	65	21	0
Coonamble	b	—	—	0
Cowra	b	58	48	0
Deniliquin	b	68	31	0
Dubbo ..	b	69	29	0
Eden	b	54	42	0
Euston ..	b	76	30	0
Forbes ...	b	—	30	0
Glen Innes	b	60	34	0
Goulburn	n	55	25	0
Grafton ..	b	71	41	0
Gunnedah	b	61	39	0
Hay	b	67	36	0
Hill End	n	—	—	0
Inverell ..	b	59	18	0
Kiandra ..	r	41	8	0
Lismore ..	b	66	46	0
Maitland..	b	52	45	0
Marsdens	n	64	40	0
Menindie	b	64	39	0
Molong ..	n	65	40	0
Moree	b	75	40	0
Moruya ..	b	62	38	0
Moss Vale	c	48	34	0
M. Victoria	f	50	39	0
Mudgee ..	n	73	26	0
Murrumbh	b	63	30	0
Murr'r'ndi	n	55	33	0
Mus'lbrook	b	63	33	0
Narrabri ..	b	64	34	0
Newcastle	b	61	49	0·01
Nowra	—	—	—	—
Orange ..	n	51	27	0
Picton	b	58	42	0
P.M'quarie	b	63	45	0
P.Stephens	r	74	46	0·05
Qu'nbeyan	n	48	32	0
Quirindi ..	n	67	34	0
Singleton	u	60	44	0
SYDNEY ..	c	56	48	0
Tamworth	—	—	—	—
Taralga ..	b	63	41	0
Tree	b	62	46	0
Tu'rfield	b	59	33	0
Wagga....	n	59	27	0
Walcha ..	n	55	25	0
Walgett ..	b	—	37	0
Wentw'rth	b	69	36	0
Wilcannia	b	—	—	0
Woll'ng ng	b	61	47	0
Young ..	n	73	31	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

[illegible] the state of the weather at 9 a.m., b [illegible] d, drizzling rain; f, fog; g, gloomy; h, hazy; [illegible] passing showers; r, rain; s, snow; t, thunder; u, [illegible] gives the maximum temperature for previous 24 [illegible] temperature; [illegible] the rain for the previous 24 [illegible] explained on the margin. At each coast station [illegible] the direction from which the wind is [illegible] means fine weather; a circle with bar, cloudy [illegible] rain; spot, raining. Next to this symbol are placed figures denoting [illegible] per hour; next, a symbol showing the state [illegible] denoting the shade temperature at 9 a.m. The barometer [illegible] barometers round the coast from Perth to Cooktown:—P., [illegible] C.B. Cape Borda; A. Adelaide; Re, Robe; P, Portland; [illegible] Observatory; Go, Gabo; E. Eden; Ma. Moruya; C.G. Jervis [illegible] S. Sydney; N, Newcastle; P.M. Port Macquarie; C, Clarence [illegible] Cooktown; Menindi, Mf. Inland the state of [illegible] Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, [illegible] and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine, with fresh easterly winds, smooth sea, barometer slightly fallen on coast and risen above one-tenth at Alice Springs. No rain.

Victoria.—Weather fine generally, winds light and variable, sea smooth, and no rain; barometers fallen slightly generally; heavy rain last night at Melbourne and Wilson's Promontory, and hoar frost at Melbourne, Portland, and Cape Otway; at Echuca barometer has risen slightly, now reading 30·37; wind S.W., and fine weather.

Tasmania.—Low Heads reports dense fog, S.S.E. wind, and barometer fallen one-tenth, now reading 30·41.

New Zealand.—Weather cloudy generally, with variable winds and light rain Wellington; barometers read—at Wellington 29·4, at Russell 29·5, at Bluff 29·5.

New South Wales.—Weather fine generally with frosts on the mountains, winds light and variable, sea smooth, barometers rising slightly generally, light rain on coast north of Sydney, particulars see map above.

Queensland.—Weather fine generally, winds from S.W. to N., and rather strong at Cooktown; sea smooth generally, except at Brisbane, where it is rough; barometers falling slightly generally; rain at Cooktown, 0·53.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegram; Cape Otway, E., 6, cloudy, smooth sea, temperature 56°; Portland, S.E., 12 fine, smooth sea, temperature 57°; Wilson's Promontory, N.E., 6, cloudy, smooth sea, temperature 52°.

New South Wales.—Albury, N.W., fine, warm, temperature 52°; Cape St. George, S.E., 14, cloudy, smooth sea, temperature 57°; Clarence River, S., 10, fine, moderate sea, temperature 64°; Deniliquin, E., fine, temperature 60°; Dubbo, E.N.E., 14, fine, temperature 53°; Eden, E., 14, fine, smooth sea, temperature 54°; Forbes calm, fine, temperature 50°; Goulburn, calm, fine, temperature 53°; Menindie, calm, fine, temperature 57°; Moruya, E., 24, fine, smooth sea, temperature 58°; Port Macquarie, S., 28, fine, smooth sea, temperature 65°; Sydney, S.E., 10, very fine, temperature 58°; Wentworth, calm, fine, temperature 54°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 9 inches above summer level; at Hay, 1 foot 4 inches above summer level; at Balranald, 2 feet 6 inches above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 8 feet 5 inches above summer level. Darling: At Wentworth, 7 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 3.

Sun rises at 6.52, sets at 5.20; Moon, —— 10.32 a.m.; Mercury, 8.9 a.m., 7.29 p.m.; Venus, 8.11 a.m., 7.13 p.m.; Mars, 4.26 a.m., 2.10 p.m.; Jupiter, 8.22 a.m., 7.35 p.m.; Saturn, 4.28 a.m., 2.22 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 3: 12.12 a.m., 12.32 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 3, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	n	62	35	0
Armidale	b	57	32	0
Balranald	c	62	33	0
Bathurst..	b	60	24	0
Bend'meer	n	56	24	0
Bodalla ..	–	—	—	—
Bourke ..	b	79	46	0
Camd'n H.	b	64	44	0
C. St. Geo.	b	62	44	0
Carcoar ..	b	50	34	0
Casino	b	74	40	0
Cassilis ..	b	55	33	0
Clarence ..	g	71	48	0
Condob'l'n	b	43	26	0
Cooma	n	58	20	0
Coonab'n.	n	66	24	0
Coonamble	u	–	—	0
Cowra	b	58	46	0
Deniliquin	g	68	34	0
Dubbo ..	b	67	27	0
Eden	b	53	41	0
Euston ..	–	—	—	—
Forbes....	b	—	29	0
Glen Innes	b	65	29	0
Goulburn	u	59	27	0
Grafton ..	b	78	42	0
Gunnedah	b	64	38	0
Hay	b	68	38	0
Hill End	b	—	—	0
Inverell ..	o	61	18	0
Kiandra ..	n	39	12	0
Lismore ..	b	76	52	0
Maitland..	f	56	40	0
Marsdens	n	63	40	0
Menindie	p	70	44	0
Molong ..	b	65	30	0
Moree	g	75	42	0
Moruya ..	b	60	39	0
Moss Vale	n	51	33	0
M. Victoria	b	55	32	0
Mudgee ..	n	75	23	0
Murrumbh	b	63	32	0
Murr'r'ndi	b	54	39	0
Mus'lbrook	n	65	28	0
Narrabri ..	u	69	37	0
Newcastle	f	62	44	0
Nowra	b	63	42	0
Orange ..	n	50	28	0
Picton	n	58	35	0
P.M'quarie	c	66	44	0
P.Stephens	b	79	47	0
Qu'nbeyan	–	—	—	—
Quirindi ..	n	69	34	0
Singleton	b	60	41	0
SYDNEY ..	b	60	44	0
Tamworth	b	65	33	0
Taralga ..	b	68	39	0
Taree	b	65	42	0
T'nt'rfield	f	64	30	0
Wagga....	–	—	—	—
Walcha ..	n	51	25	0
Walgett ..	–	—	—	—
Wentw'rth	c	74	45	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	77	43	0
Young .	b	76	31	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 3 .. ..32·795
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E. — T. storm, wind S. — Rain, wind W. If it is CALM, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.

Curve showing state of Barometer.

H. C. RUSSELL,
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt., Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; Wp, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Fine generally, foggy in places; very light rain here and there inland to Blinman; westerly winds about Adelaide. Telegrams too late for map.

Victoria.—Generally cloudy, fine at Melbourne and Cape Otway, light rain falling at Portland; smooth sea, falling barometers, and light northerly winds on coast; rainfall, Portland 0·02, Wilson's Promontory 0·01.

Tasmania.—Dull on N. coast, with fresh E. wind and falling barometer. No rain reported.

New Zealand.—Russell, barometer 29·60, wind N.W., fine; Wellington, barometer 29·70, wind S.E. strong, rain 0·42; Bluff, barometer 30·00, wind S.E., showery.

New South Wales.—Generally fine and clear, with light N.W. to S.W. winds and calms and falling barometers. Smooth sea, falling barometers, light westerly winds, and very clear weather on coast. North-ward. Cloudy in places on western slopes of mountains; for details see map. Showery at 9 a.m. at Menindie, but none recorded. Gabo Island reports a sharp shock of earthquake, S. to N., lasting 50 seconds, on Sunday, 2nd instant, at 12.58 a.m.

Queensland.—Generally fine on E. coast; sea moderate; winds, S.E. and S.W. Rain: Brisbane, 0·02; Cape Moreton, 0·29; and Cooktown, 0·50.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.N.W., 13, cloudy but fine, temperature 62°; Cape Otway, W.N.W., 13, squally, moderate sea, temperature 59°; Portland, W., 23, fine but cloudy, smooth sea, temperature 52°; Wilson's Promontory, W., 34, cloudy, moderate sea, temperature 56°.

New South Wales.—Albury, calm, cloudy, temperature 52°; Clarence River, N.E., 14, fine, moderate sea, temperature 66°; Cape St. George, calm, fine, moderate sea, temperature 60°; Deniliquin, N.W., dull, temperature 60°; Dubbo, calm, fine, temperature 55°; Eden, E., 14, fine, slight sea, temperature 56°; Forbes, calm, fine, temperature 52°; Goulburn, N.W., fine, temperature 53°; Menindie, calm, fine, temperature 60°; Moruya, N.E., 14, fine, moderate sea, temperature 57°; Newcastle, S., 8, fine, moderate, temperature 60°; Port Macquarie, N.E., [illegible], fine, smooth sea, temperature 66°; Sydney, E.W.E., 8, fine, smooth sea, temperature 59°; Wentworth, W., fine, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Hay, 1 foot 6 inches above summer level; at Balranald, 2 feet 4 inches above summer level. Murray: At Albury, 1 foot 5 inches above summer level. Darling: Wentworth, 6 feet 10 inches above summer level; at Pooncarie, summer level; at Menindie, low; at Wilcannia, 1 foot 6 inches and at Burke, low.

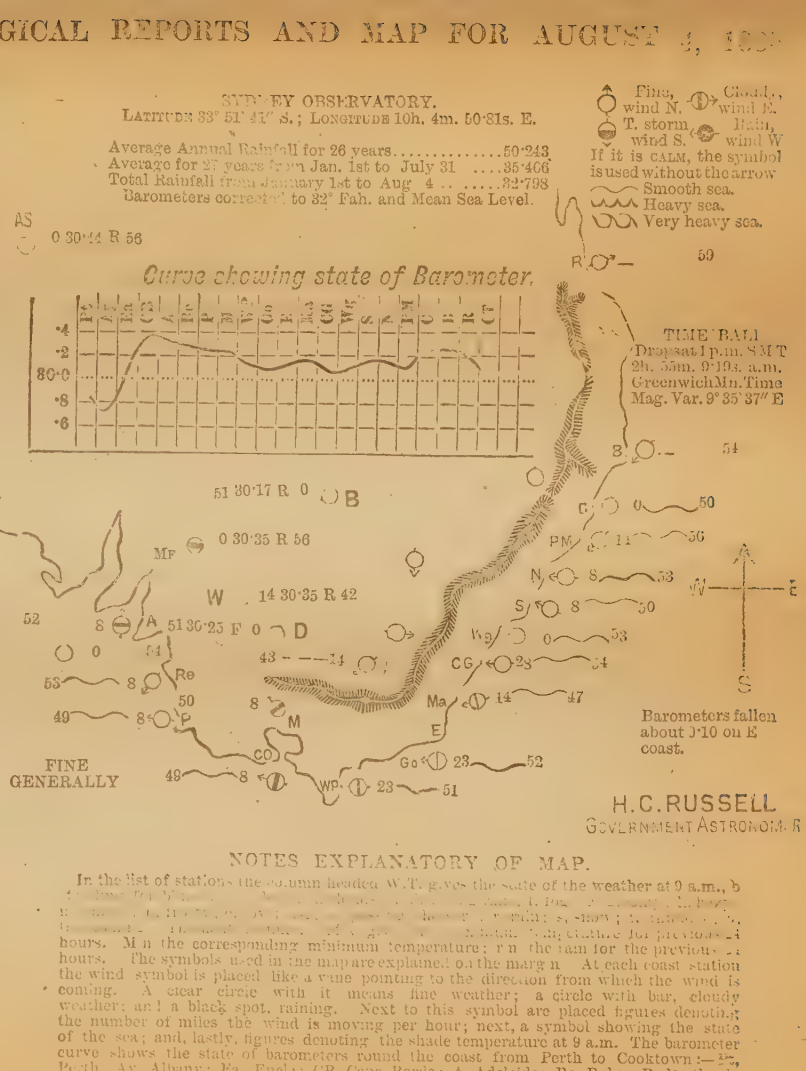
ASTRONOMICAL MEMORANDA FOR AUGUST 4.

Sun rises at 6.51, sets at 5.20; Moon, —— 10.32 a.m.; Mercury, 8.8 a.m., 7.30 p.m.; Venus, 8.11 a.m., 7.15 p.m.; Mars, 4.25 a.m., 2.9 p.m.; Jupiter, 8.19 a.m., 7.32 p.m.; Saturn, 4.25 a.m., 2.19 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 4: 12.59 a.m., 1.21 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 4, 1895.

Stations	wt	Mx	Mn	R'in
Albury ..	c	64	38	0
Armidale	b	61	33	0
Balranald	b	72	34	0
Bathurst..	b	63	27	0
Bend'meer	b	53	27	0
Bodalla ..	g	69	34	0
Bourke ..	b	63	41	0
Camd'n H.	b	64	44	0
C. St. Geo.	b	63	43	0
Carcoar ..	n	49	35	0
Casino	b	76	42	0
Cassilis ..	b	57	33	0
Clarence ..	b	76	49	0
Condob'lin	b	46	29	0
Cooma	n	63	27	0
Coonab'n.	n	70	24	0
Coonamble	b	—	—	0
Cowra	b	58	49	0
Deniliquin	f	62	33	0
Dubbo ..	b	70	28	0
Eden	—	—	—	—
Euston ..	b	76	32	0
Forbes....	b	—	32	0
Glen Innes	c	50	30	0
Goulburn	b	63	30	0
Grafton ..	c	79	42	0
Gunnedah	b	65	38	0
Hay	b	64	38	0
Hill End	b	—	—	0
Inverell ..	c	61	18	0
Kiandra ..	n	42	20	0
Lismore ..	c	73	48	0
Maitland..	b	58	38	0
Marsdens	b	64	41	0
Menindie	c	68	49	0·03
Molong ..	b	64	32	0
Moree	b	75	49	0
Moruya ..	c	62	41	0
Moss Vale	n	53	33	0
M. Victoria	b	53	34	0
Mudgee ..	n	71	20	0
Murrumbh	b	68	34	0
Murr'r'ndi	n	60	30	0
Mus'lbrook	n	66	28	0
Narrabri ..	b	69	37	0
Newcastle	b	64	43	0
Nowra	b	67	43	0
Orange ..	n	49	29	0
Picton	c	59	34	0
P.M'quarie	b	67	44	0
P.Stephens	b	72	42	0
Qu'nbeyan	n	51	34	0
Quirindi ..	b	71	34	0
Singleton	b	63	39	0
SYDNEY ..	b	61	45	0
Tamworth	b	67	34	0
Taralga ..	b	64	33	0
Taree	b	66	42	0
T'nt'rfield	c	61	35	0
Wagga....	b	57	34	0
Walcha ..	n	56	25	0
Walgett ..	b	—	38	0
Wentw'rth	f	72	40	0
Wilcannia	c	—	—	0
Woll'ng ng	b	68	48	0
Young ..	c	79	32	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b [illegible] fog; [illegible] rain; s, snow; [illegible] for previous 24 hours. M n the corresponding minimum temperature; r n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve [illegible] to trace the depressions, b[illegible] westwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and dull, wind light from west, sea smooth, showery at Perth. Rainfall: Albany, 0·07; Geraldton, 0·31. Perth, 0·63; Esperance Bay, 0·02.

South Australia.—Weather generally fine and clear, scattered clods over Mount Lofty ranges and on coast, foggy in parts; light variable winds and calms, smooth sea, rising barometers, and light N.W. winds and calms on coast; fine and calm inland. Rainfall: Robe, 0·09; Macdonell Bay, 0·01.

Victoria.—Generally cloudy and unsettled, light westerly winds, smooth and moderate sea, and rising barometers on coast; half cloudy with light N.W. wind at Echuca; calm at Omeo. Rainfall: Lake Entrance, 0·06; Wilson's Promontory, 0·25; Cape Otway, 0·12; Portland, 0·09; Melbourne, 0·32.

Low Heads.—Fine and clear on N. coast, with fresh W. wind. Rainfall: Low Heads, 0·02.

New Zealand.—Russell, barometer 29·90, wind S.E., fine and clear; Wellington, barometer 30·00, wind S.W. squally, rain 0·27; Bluff, barometer 30·10, calm, fine and clear.

New South Wales.—Fine and very clear generally, smooth sea, light westerly winds, falling barometers, and very clear weather on coast. Calm inland. Details in map above.

Queensland.—Generally fine and clear on E. coast; with light S.W. to S.E. winds, and moderate sea. Dull at Cooktown. Rainfall: Brisbane, 0·07; Cooktown, 0·03.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 12, fine, temperature 54°; Cape Otway, W.S.W., 6, misty, moderate sea, temperature 57°; Portland, S.S.W., 12, fine, smooth sea, temperature 56°; Wilson's Promontory, W., 24, fine, moderate sea, temperature 56°.

New South Wales.—Albury, S.W., like thunderstorm, temperature 58°; Cape St. George, S., 28, fine, smooth sea, temperature 60°; Clarence River, S.S.E., 14, fine, moderate sea, temperature 67°; Deniliquin, calm, fine, temperature 56°; Dubbo, S.W., cloudy, temperature 54°; Forbes, calm, fine, temperature [illegible]; Goulburn, calm, fine, temperature 55°; Menindie, S.W., 14, fine, temperature 69°; Moruya, S.E., 28, fine, moderate sea, temperature 59°; Newcastle, S.E., 8, fine, no sea, temperature [illegible]; Port Macquarie, E., 14, fine, moderate sea, temperature [illegible]; Sydney, S., 8, fine, smooth sea, temperature 60°; Wentworth, calm, fine, temperature 54°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at [illegible] 1 foot 6 inches above summer level; at Balranald, 1 foot inches above summer level. Murray: At [illegible], 1 [illegible] inches above summer level; at Euston, 7 feet 10 inches above summer level. Darling: At Wentworth, 6 feet 5 inches above summer level; at Wilcannia, 2 feet 3 inches above summer level; at Bourke, low.

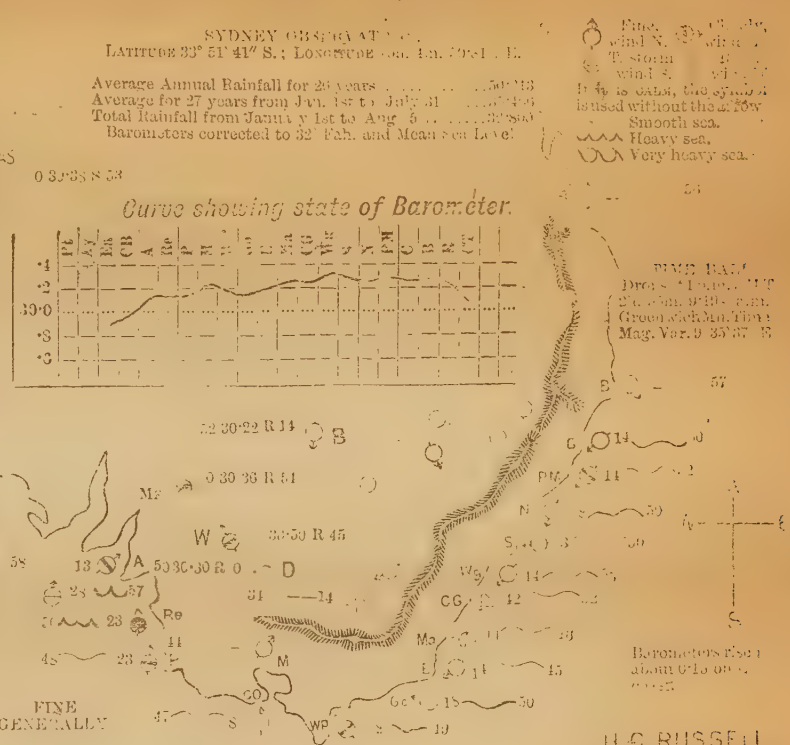
ASTRONOMICAL MEMORANDA FOR AUGUST 5.

Sun rises at 6.50, sets at 5.21; Moon, 1.20 a.m., 11.58 a.m.; Mercury, 8.6 a.m., 7.32 p.m.; Venus, 8.10 a.m., 7.17 p.m.; Mars, 4.24 a.m., 2.8 p.m.; Jupiter, 8.15 a.m., 7.[illegible] p.m.; [illegible] 4.21 a.m., 2.15 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 5: 1.53 a.m., 2.25 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 5, 1885.

Stations	wt	Mx	mn	R'in
Albury ..	n	64 38		0
Armidale	b	60 32		0
Balranald	b	76 34		0
Bathurst..	n	60 26		0
Bend'meer	n	59 25		0
Bodalla ..	g	69 40	0	61
Bourke ..	c	71 30		0
Camd'n H.	c	64 48		0
C. St. Geo.	c	61 45	0	60
Carcoar ..	n	50 34		0
Casino	b	76 42		0
Cassilis .	b	58 34		0
Clarence ..	c	76 47		0
Condob'lin	b	45 28		0
Cooma ...	c	65 31	0	07
Coonab'n.	n	67 24		0
Coonamble	b	— —		0
Cowra	b	58 50		0
Deniliquin	b	66 29		0
Dubbo ..	b	68 28		0
Eden	b	59 41		0
Euston ..	b	71 28		0
Forbes ...	b	— 33		0
Glen Innes	n	77 26		0
Goulburn	f	59 30		0
Grafton ..	b	77 41		0
Gunnedah	b	64 38		0
Hay	b	66 35		0
Hill End	b	— —		0
Inverell .	b	61 38		0
Kiandra ..	n	42 18		0
Lismore ..	b	73 45		0
Maitland..	b	61 43	0	12
Marsdens	n	65 41		0
Menindie	b	65 45		0
Molong ..	b	63 33		0
Moree	b	76 37		0
Moruya ..	g	63 43	0	26
Moss Vale	f	53 36		0
M. Victoria	n	54 34		0
Mudgee ..	n	72 23		0
Murrumbh	b	65 31		0
Murr'r'ndi	b	57 36		0
Mus'lbrook	u	64 31		0
Narrabri ..	b	70 41		0
Newcastle	b	64 50		0
Nowra	c	65 43		0
Orange ..	b	52 28		0
Picton	b	63 37		0
P.M'quarie	u	64 44		0
P.Stephens	b	79 48		0
Qu'nbeyan	b	58 36		0
Quirindi ..	n	72 38		0
Singleton	b	63 41	0	01
SYDNEY ..	c	62 47		0
Tamworth	b	66 30		0
Taralga ..	f	61 32		0
Taree	b	68 45		0
T'nt'rfield	b	63 20		0
Wagga....	n	65 28		0
Walcha ..	b	57 24		0
Walgett ..	b	— 38		0
Wentw'rth	c	73 37		0
Wilcannia	b	— —		0
Woll'ng ng	b	67 45		0
Young .	n	80 31	0	05



NOTES EXPLANATORY OF MAP.

[illegible]

Western Australia.—Fine and clear on S. coast at Esperance Bay, with light N.W. winds and smooth sea. Rain, 0·02.

South Australia reports weather generally dull inland to Peake, winds generally from S.S.E. and N., and varying from 13 to 31 miles per hour in velocity; smooth sea, falling barometers, fresh N. winds and cloudy weather (with rain in places) on southern coast; S.E. winds and calm with fine weather in Northern Territory. Rainfall: C. Borda, 0·01.

Victoria.—Generally fine but cloudy, with northerly winds and steady barometers; slight sea on coast; hoar frost in night at Echuca, Melbourne, and Omeo. Portland, 0·01; Lake Entrance, 0·01.

Tasmania.—Fine and clear on N. coast, with light S.E. breeze.

New Zealand.—Generally fine, with light S.E. wind, and barometers standing at 30·10.

New South Wales.—Generally fine and clear, frosty on high lands, winds light from S.W. Calm inland. Details of weather will be found in map above. On the coast the weather is very clear and fine. At a few stations some scattered clouds are reported, but a smooth sea, rising barometer, and light S.W. or W. winds are very general.

Queensland.—Generally fine and clear on E. coast, with S.E. winds and moderate sea. Dull at Cooktown, with strong S.E. wind. Rainfall: Cape Moreton, 0·14.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.N.E., 12, cloudy, temperature 56°; Cape Otway, N.N.E., 6, misty, smooth sea, temperature 56°; Portland, N., 36, threatening rain, smooth sea, temperature 53°; Wilson's Promontory, W., 12, cloudy, smooth sea, temperature 53°.

New South Wales.—Albury, W., fine, temperature 52°; Clarence River, S.E., dull, smooth sea, temperature 45°; Deniliquin, W., cloudy, temperature 60°; Dubbo, S.W., fine, temperature 55°; Eden, E., fine, slight sea, temperature 56°; Forbes, calm, fine, temperature 60°; Goulburn, calm, fine, temperature 57°; Menindie, E., 14, cloudy, temperature 61°; Moruya, N.E., 28, fine, smooth sea, temperature 66°; Newcastle, S., 8, fine, smooth sea, temperature 60°; Port Macquarie, S.S.E., 42, dull, smooth sea, temperature 64°; Sydney, S.E., 8, scattered clouds, smooth sea, temperature 62°; Tamworth, S., 8, fine, temperature 66°; Wagga, S., 8, fine, temperature 65°; Wentworth, S., 8, fine, temperature 73°; Wilcannia, S., 8, fine, temperature 67°; Woolongong, S., Sydney; N. Newcastle; Port Macquarie, C. Clarence River, Brisbane; R. Rockhampton, C. Cooktown; Normanton, W. [illegible] are the [illegible] given in figures at Albury, Deniliquin, Wentworth, Bourke, and [illegible] Sydney. The barometer curve carries on [illegible] depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding [illegible] following.

ASTRONOMICAL MEMORANDA FOR AUGUST 6.

Sun rises at 6.50, sets at 5.22; Moon, 2.23 a.m., 12.47 a.m.; Mercury, 8.4 a.m., 7.34 p.m.; Venus, 8.9 a.m., 7.13 p.m.; Mars, 4.23 a.m., 2.7 p.m.; Jupiter, 8.12 a.m., 7.26 p.m.; Saturn, 4.18 a.m., 2.12 p.m. New moon, 10th; full moon, 25th.

High water at Fort Denison August 6: 3.6 a.m., 3.9 p.m.

METEOROLOGICAL ABSTRACT, JULY, 1885,

with results for the same month during the preceding 27 years:—

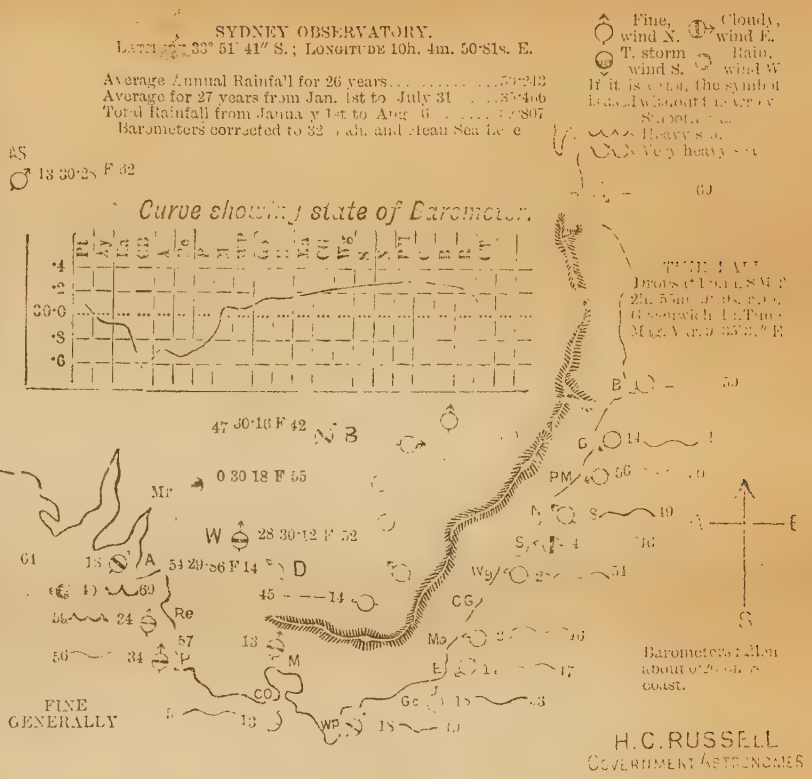
—	Barometer at 32° Fah and mn. sea lev'l.	Temperature in Shade.			Rainfall.	
		Mean Max.	Mean Min.	Mean.	Amount. Inches.	No. of days.
July, 1885 ...	30·206	58·9	46·8	52·9	7·451	20
Average for 27 years ...	30·119	59·2	45·5	52·4	4·229	17
Monthly Extremes:						
Highest ...	30·254	61·9	49·1	54·9	14·952	20
Year ...	1869.	1867.	1877.	1877 and 1864	1860.	1885.
Lowest ...	29·967	57·0	42·3	50·7	0·120	4
Year ...	1861.	1861.	1859.	1859.	1862.	1862 & 1871

Wind. July, 1885: Prevailing direction, W.; average direction for 27 years, W.; July, 1885: mean miles per hour, 7·6.

Temperature.—July, 1885: Highest shade temperature, 64·7, on 25th; highest shade temperature in any July since 1859, 74·9, July 17, 1871; lowest shade temperature in any July since 1859, 36·0, July 18, 1861; July, 1885: lowest shade temperature, 42·6, on 23th.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 6, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	61	34	0
Armidale	n	65	30	0
Balranald	b	72	35	0
Bathurst..	b	62	28	0
Bend'meer	n	56	24	0
Bodalla ..	-	—	—	—
Bourke ..	g	77	36	0
Camd'n H.	b	63	46	0
C. St. Geo.	-	—	—	—
Carcoar ..	n	50	36	0
Casino	b	73	31	0
Cassilis .	n	55	32	0
Clarence ..	b	72	42	0
Condob'lin	b	48	29	0
Cooma	n	60	24	0
Coonab'n.	n	66	23	0
Coonamble	b	—	—	0
Cowra	b	60	50	0
Deniliquin	b	65	27	0
Dubbo .	b	69	30	0
Eden	c	57	44	0
Euston ..	c	70	41	0
Forbes....	b	—	33	0
Glen Innes	b	65	32	0
Goulburn	g	59	30	0
Grafton ..	b	75	48	0
Gunnedah	b	62	36	0
Hay	c	65	41	0
Hill End	b	—	—	0
Inverell ..	b	61	18	0
Kiandra ..	n	43	18	0
Lismore ..	c	70	43	0
Maitland..	f	62	40	0
Marsdens	n	66	41	0
Menindie	c	68	46	0
Molong ..	b	65	30	0
Moree	b	98	39	0
Moruya ..	c	60	39	0
Moss Vale	c	51	35	0
M. Victoria	b	51	35	0
Mudgee ..	n	74	24	0
Murrumbh	-	—	—	—
Murr'r'ndi	n	56	35	0
Mus'lbrook	n	62	29	0
Narrabri ..	b	65	35	0
Newcastle	b	63	43	0
Nowra	b	63	42	0
Orange ..	n	50	28	0
Picton	f	58	38	0
P.M'quarie	b	65	45	0
P.Stephens	b	80	45	0
Qu'nbeyan	b	52	32	0
Quirindi ..	b	70	48	0
Singleton	b	60	40	0
SYDNEY ..	c	60	45	0·01
Tamworth	b	66	31	0
Taralga ..	f	61	32	0
Taree	b	66	43	0·09
T'nt'rfield	b	65	31	0
Wagga....	b	65	29	0
Walcha ..	b	56	28	0
Walgett ..	b	—	39	0
Wentw'rth	u	64	44	0
Wilcannia	b	—	—	0
Woll'ng ng	b	64	47	0
Young ..	b	74	35	0



NOTES EXPLANATORY OF MAP.

In the first of the four columns denoted wt. gives the state of the weather at 9 a.m., b fine; g fog or haze; n, detached clouds; u, uniform cloud; c, overcast; f, fog; r, rain; s, snow; t, thunderstorm; a, hail; o, dew; - no report. Mx gives the maximum temperature for previous 24 hours, Mn the corresponding minimum temperature, and R'in rain for the previous 24 hours. The symbols used on the map are explained in the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with a means fine weather; a circle with a bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the sea temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown: P, Perth; Ac, Albany; Ea, Lucia; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf, Marsdens; the standard barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy, with light variable winds; showery at Perth; rough sea at Albany. Rainfall—Geraldton, 0·19; Perth, 0·18; Albany, 0·46; Esperance Bay, 0·33.

South Australia reports weather generally dull inland to Hawker; winds N.E. to N.W., and varying in force from 23 to 34 miles per hour; strong gales blowing between Streaky Bay and Kangaroo Island; rough sea and falling barometers on coast; S.E. and N.E. winds and calm, with fine weather in Northern Territory. Rainfall—Streaky Bay, 0·01; Cape Borda, 0·14; Adelaide, 0·02; Robe, 0·04; M'Donnell Bay, 0·06.

Victoria.—Cloudy on coast, sea smooth and slight; barometers falling; wind light to moderate from N. and N.N.E.; fine, but but cloudy, with N. and N.E. winds inland. Rainfall—Portland, 0·03.

Tasmania.—Sky three-quarters clouded at Low Heads, with fresh E. wind.

New Zealand.—Russell, barometer 30·10, wind S.E.; Wellington, barometer 30·20, wind E.; Bluff, barometer 30·00, wind N.; winds light, weather fine generally.

New South Wales.—Generally fine and clear. Light westerly winds, smooth sea, and falling barometers on coast. Calm and clear inland. Details will be found in map above.

Queensland.—Generally fine and clear on E. coast, with S.W. to S.E. winds and moderate sea. Dull weather at Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.E., 13, dull, temperature 61°; Cape Otway, N.E., 18, dull, rough sea, temperature 61°; Portland, N., 40, dull, slight sea, temperature 59°; Wilson's Promontory, N.E., 23, cloudy, moderate sea, temperature 57°.

New South Wales.—Albury, S.W., cloudy, temperature 55°; Cape St. George, N., 28, fine, smooth sea, temperature 62°; Clarence River, S., 14, fine, smooth sea, temperature 66°; Deniliquin, N., 14, cloudy, temperature 59°; Dubbo, W., fine, temperature 55°; Eden, N.E., 14, fine, smooth sea, temperature 55°; Forbes, calm, fine, temperature 53°; Goulburn, calm, fine, temperature 51°; Menindie, calm, fine, temperature 61°; Moruya, N.E., 14, fine, smooth sea, temperature 58°; Newcastle, W., 14, fine, smooth sea, temperature 66°; Sydney, E.N.E., 12, fine, smooth sea, temperature 61°; Wentworth, N.E., 42, cloudy, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 3 inches above summer level; at Hay, 1 foot 5 inches above summer level; at Balranald, 1 foot 8 inches above summer level. Murray: At Albury, [illegible] inches above summer level; at Euston, 6 feet 6 inches above summer level. Darling: At Wentworth, 6 feet 2 inches above summer level; at Pooncarie and Menindie, low; at Wilcannia, [illegible] feet 6 inches above summer level; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 7.

Sun rises at 6.49, sets at 5.22; Moon, 3.26 a.m., 1.44 p.m.; Mercury, 8.3 a.m., 7.35 p.m.; Venus, 8.9 a.m., 7.21 p.m.; Mars, 4.21 a.m., 2.5 p.m.; Jupiter, 8.8 a.m., 7.24 p.m.; Saturn, 4.14 a.m., 2.8 p.m. New moon, 10th; full moon, 23th.

High water at Fort Denison, August 7: 4.36 a.m., 5.14 p.m.

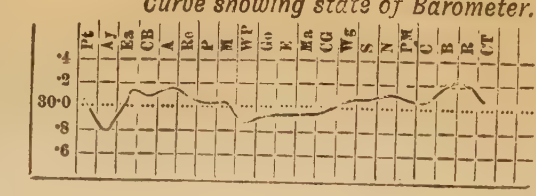
METEOROLOGICAL REPORTS AND MAP FOR AUGUST 7, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	68	45	0
Armidale	b	60	50	0
Balranald	b	74	40	0
Bathurst..	c	66	28	0
Bend'meer	n	59	25	0
Bodalla ..	b	67	36	0
Bourke ..	c	79	52	0
Camd'n H.	b	64	45	0
C. St. Geo.	c	63	50	0
Carcoar ..	b	53	39	0
Casino	b	73	3[illegible]	0
Cassilis ..	b	51	35	0
Clarence ..	b	71	48	0
Condob'lin	u	53	36	0
Cooma	n	65	30	0
Coonab'n.	b	70	27	0
Coonamble	-	—	—	--
Cowra	g	59	51	0
Deniliquin	b	70	40	0
Dubbo ..	b	73	33	0
Eden	u	56	46	0
Euston ..	b	75	33	0
Forbes....	u	—	37	0
Glen Innes	b	66	32	0
Goulburn	c	61	34	0
Grafton ..	b	76	47	0
Gunnedah	c	63	38	0
Hay	b	71	45	0
Hill End	b	—	—	0
Inverell ..	b	59	19	0
Kiandra ..	c	49	31	0
Lismore ..	c	74	45	0
Maitland ..	n	63	38	0
Marsdens	u	70	41	0
Menindie	b	76	49	0
Molong ..	b	68	33	0
Moree	b	72	42	0
Moruya ..	g	62	43	0
Moss Vale	u	55	35	0
M. Victoria	c	57	40	0
Mudgee ..	n	75	25	0
Murrumbh	c	76	34	0
Murr'r'ndi	u	59	40	0
Mus'lbrook	o	65	29	0
Narrabri ..	b	68	27	0
Newcastle	b	62	43	0
Nowra	-	—	—	—
Orange ..	b	61	31	0
Picton	c	61	37	0
P.M'quarie	b	66	44	0
P.Stephens	b	81	43	0
Qu'nbeyan	n	56	36	0
Quirindi ..	b	70	38	0
Singleton	b	63	41	0
SYDNEY ..	c	64	45	0
Tamworth	c	66	32	0
Taralga ..	b	66	38	0
Taree	b	66	42	0
Tnt'rfield	-	—	—	—
Wagga....	c	57	46	0
Walcha ..	n	52	24	0
Walgett ..	-	—	—	—
Wentw'rth	b	75	41	0
Wilcannia	b	—	—	0
Woll'ng ng	c	69	46	0
Young ..	g	74	40	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 7 .. ..32·807
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E.
T. storm wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



TIME BALL
Drops at 1 p.m. S.M.T
2h. 55m. 9·98s. a.m.
Greenwich M. Time
Mag. Var. 9° 35' 57" E

FINE GENERALLY CLOUDY ON COAST.

Barometers risen about 0·20 on S coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; Rin the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown: Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy generally with light variable winds and smooth sea; showery at Perth. Rainfall—Albany, 0·13; Esperance Bay, 0·11, and Perth, 0·49.

South Australia reports weather generally fine with scattered clouds, and light N.W. to S.W. winds; light rains recorded S.E. of Burra, heaviest over Mount Lofty Ranges, ranging from 0·20 0·30, and in S.E. from 0·30 to 0·40. Rough and moderate sea, rising barometers, and light westerly winds on coast, S.E. winds and calms with fine clear weather in Northern Territory and Central Australia. Rainfall—Streaky Bay, 0·19; Cape Borda, 0·14; Adelaide, 0·07; Robe, 0·04; M'Donnell Bay, 0·49.

Victoria.—Cloudy on coast, with light N.W. wind and moderate sea. Rough at Cape Otway. Fine and calm inland at Omeo, and fine but cloudy at Echuca. Rainfall—Melbourne, 0·41; Portland, 0·62; Cape Otway, 0·23; Wilson's Promontory, 0·14; Lake Entrance, 0·01.

Tasmania.—Dull on north coast, with fresh E.S.E. wind. Rainfall—Low Heads, 0·53.

New Zealand.—Russell, barometer 30·20, wind S.E., weather showery; Wellington, barometer 30·30, wind S.E., weather fine, rain 0·42 in night; Bluff, barometer 30·40, wind calm, fine and clear.

New South Wales.—Generally fine and clear; scattered clouds, smooth sea, falling barometers, and light westerly winds on coast; fine and calm inland; no rain. Full details in map above.

Queensland.—Generally fine and clear on E. coast, with S.E. to S.W. winds and moderate sea; dull at Cooktown. Rain, 0·30.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 12, cloudy, barometers steady, temperature 55°; Cape Otway, W., 18, misty, rough sea, temperature 55°; Portland, S.W., 24, fine, smooth sea, temperature 54°; Wilson's Promontory, W. 24, squally, moderate sea, temperature 52°.

New South Wales.—Albury, S.W., dull, temperature 60°; Cape St. George, N.W., 42, scattered clouds, temperature 62°; Clarence River, N.W., fine, smooth sea, temperature 73°; Deniliquin, S.W., fine, temperature 56°; Dubbo, S.W., fine, temperature 60°; Eden, S.W., 28, fine, slight sea, temperature 60°; Forbes, calm, fine, temperature 63°; Goulburn, N.W., 14, fine, temperature 58°; Menindie, N.W., fine, temperature 62°; Moruya, S., 42, gloomy weather to south, smooth sea, temperature 58°; Newcastle, N.W., fine, smooth sea, temperature 65°; Port Macquarie, N.E., 14, fine, smooth sea, temperature 68°; Sydney, N., 8, scattered clouds, smooth sea, temperature 66°; Wentworth, S.W., fine, temperature 50°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 9 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 1 foot 8 inches above summer level. Murray: At Albury, 1 foot 5 inches above summer level; at Euston, 6 feet 2 inches above summer level. Darling: At Wentworth, 5 feet 10 inches above summer level; at Pooncarie and Menindie, low; at Wilcannia, 2 feet 6 inches above summer level.

ASTRONOMICAL MEMORANDA FOR AUGUST 8.

Sun rises at 6.48, sets at 5.23; Moon, 4.25 a.m., 2.46 p.m.; Mercury, 8.0 a.m., 7.35 p.m.; Venus, 8.8 a.m., 7.23 p.m.; Mars, 4.20 a.m., 2.4 p.m.; Jupiter, 8.5 a.m., 7.21 p.m.; Saturn, 4.10 a.m., 2.4 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 8: 5.51 a.m., 6.28 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 8, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	64	33	0
Armidale	b	64	36	0
Balranald	b	72	34	0
Bathurst..	b	66	28	0
Bend'meer	n	63	29	0
Bodalla ..	b	71	31	0·05
Bourke ..	b	76	37	0
Camd'n H.	c	67	48	0
C. St. Geo.	c	64	47	0·06
Carcoar ..	n	57	35	0
Casino	b	80	39	0
Cassilis .	b	61	32	0
Clarence ..	b	76	49	0
Condob'lin	b	45	28	0
Cooma....	n	66	31	0
Coonab'n.	b	73	36	0
Coonamble	b	—	—	0
Cowra	b	61	53	0
Deniliquin	b	59	30	0
Dubbo ..	-	—	—	--
Eden	b	60	46	0
Euston ..	b	70	25	0
Forbes ...	b	—	32	0
Glen Innes	b	65	31	0
Goulburn	f	63	33	0
Grafton ...	b	82	51	0
Gunnedah	b	71	44	0
Hay	b	63	34	0
Hill End	b	—	—	0
Inverell ..	b	62	19	0
Kiandra ..	f	48	27	0
Lismore ..	b	78	44	0
Maitland ..	b	53	43	0
Marsdens	n	65	41	0
Menindie	c	64	40	0
Molong ..	b	66	33	0
Moree	b	81	46	0
Moruya ..	b	68	49	0·13
Moss Vale	b	58	37	0
M. Victoria	n	59	34	0
Mudgee ..	b	75	27	0
Murrumbh	b	69	33	0
Murr'r'ndi	u	65	45	0
Mus'lbrook	c	72	29	0
Narrabri ..	b	65	34	0
Newcastle	b	66	43	0
Nowra	-	—	—	--
Orange ..	b	55	31	0
Picton	b	61	41	0
P.M'quarie	b	70	49	0
P.Stephens	c	75	48	0·10
Qu'nbeyan	n	59	34	0
Quirindi ..	b	72	39	0
Singleton	b	63	44	0
SYDNEY ..	g	67	49	0
Tamworth	b	72	33	0
Taralga ..	b	61	30	0
Taree	c	69	49	0
T'nt'rfield	b	65	24	0
Wagga....	b	65	29	0
Walcha ..	b	52	29	0
Walgett ..	b	—	43	0
Wentw'rth	b	65	33	0
Wilcannia	b	—	—	0
Woll'ng ng	b	68	48	0
Young ..	n	79	31	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 .....35·466
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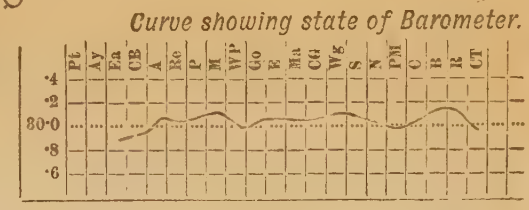
Fine, wind N. Cloudy, wind E.
T. storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

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In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy on west coast, with W. and S.W. winds and smooth sea; rough sea on south coast. Rainfall—Perth, 0·32.; Esperance Bay, 0·13.

South Australia reports weather generally fine and clear, winds light from N.E. to N.W., and fresh on coast, with rough sea and falling barometers.

Fine with S.E. winds and calms in Northern Territory and Central Australia; no rain.

Victoria.—Fine and clear generally; light rain falling at Wilson's Promontory; smooth sea, steady barometers, and light W. winds on coast; hoar frost in night at Melbourne and Omeo; fine inland at Echuca, with fresh W.S.W. wind. Rainfall—Portland, 0·07; Cape Otway, 0·05; Wilson's Promontory, 0·05.

Tasmania.—Foggy on N. coast, with light S.S.E. wind.

New Zealand.—Russell, barometer 30·20, wind N.E., showery; Wellington, barometer 30·40, wind E., dull; Bluff, barometer 30·40, wind N.E., fine and clear.

New South Wales.—Generally fine and clear; smooth sea, light S.W. and S. winds and rising barometers on coast; fine and calm inland. Details in map above.

Queensland.—Generally fine and clear; moderate sea and light S.E. to S.W. winds on E. coast; dull at Cooktown. Rain: 0·06.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S., cloudy, temperature 54°; Cape St. George, S.S.E., 18, fine, little sea, temperature 56°; Clarence River, S., 20, fine, smooth sea, temperature 65°; Deniliquin, calm, fine, temperature 60°; Dubbo, calm, fine, temperature 56°; Eden, S.W., 14, fine, smooth sea, temperature 59°; Forbes, calm, fine, temperature 61°; Goulburn, calm, fine, temperature 58°; Menindie, N., fine, clear, temperature 55°; Moruya, N.E., 14, fine smooth sea, temperature 57.; Newcastle, S., 20, showery, moderate sea, temperature 68°; Port Macquarie, S.S.W., 40, fine, smooth sea, temperature 67°; Sydney, S., 10, fine, temperature 57°; Wentworth, N.W., fine, temperature 53°.

Victoria.—Cape Otway, N.N.E., 6, fine but misty, sea smooth, temperature 57°; Portland, N.N.W., 30, cloudy, smooth sea, temperature 56°; Wilson's Promontory, W. 18, cloudy, moderate sea, temperature 52°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 8 inches above summer level; at Balranald, 1 foot 7 inches above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 5 feet 11 inches above summer level. Darling: At Wentworth, 5 feet 6 inches above summer level; at Pooncarie, low; at Menindie, 4 inches above summer level; at Wilcannia, 2 feet 6 inches above summer level; Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 10.

Sun rises at 6.46, sets at 5.25; Moon, 6.16 a.m., 4.56 p.m.; Mercury, 7.55 a.m., 7.34 p.m.; Venus, 8.6 a.m., 7.27 p.m.; Mars, 4.18 a.m., 2.2 p.m.; Jupiter, 7.15 a.m., 7.15 p.m.; Saturn, 4.3 a.m., 1.57 p.m. New moon, 10th; full moon, 26th.

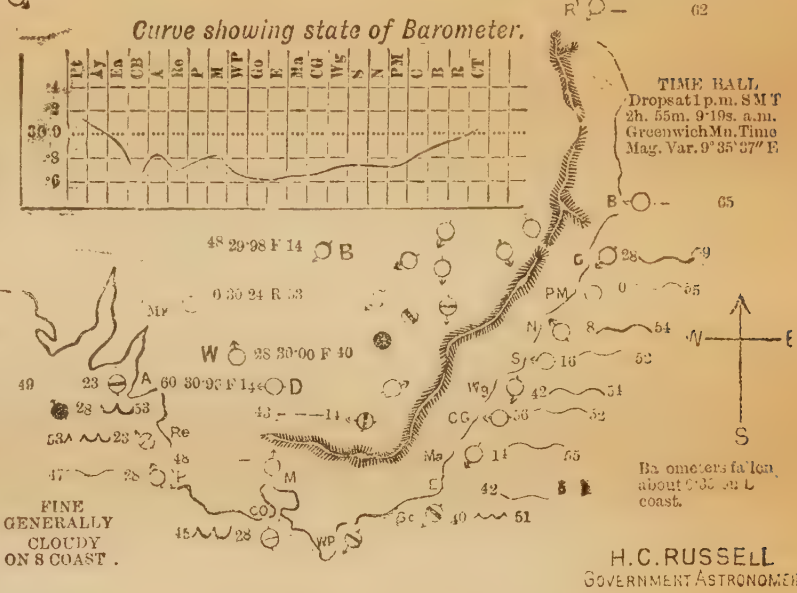
High water at Fort Denison, August 10: 7.53 a.m., 8.19 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 10, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	c	61	34	0·70
Armidale	u	60	31	0
Balranald	b	76	29	0·61
Bathurst..	u	62	24	0·21
Bend'meer	b	54	35	0
Bodalla ..	b	67	25	0
Bourke ..	b	75	38	0
Camd'n H.	b	68	46	0
C. St. Geo.	b	59	46	0
Carcoar ..	r	52	35	0·70
Casino....	b	80	43	0
Cassilis ..	g	52	37	0·04
Clarence ..	b	75	54	0
Condob'lin	u	45	27	0·26
Cooma....	g	54	34	0·03
Coonab'n.	u	60	35	0
Coonamble	-	—	—	--
Cowra	u	61	50	0·47
Deniliquin	b	65	33	0·46
Dubbo ..	g	54	26	0·13
Eden	c	56	47	0
Euston ..	b	57	30	0·46
Forbes....	u	—	20	0·36
Glen Innes	b	62	24	0
Goulburn	b	55	30	0·06
Grafton ..	b	82	59	0
Gunnedah	b	63	38	0
Hay	b	43	37	0·28
Hill End	u	—	—	0·22
Inverell ..	b	61	30	0
Kiandra ..	s	43	28	0
Lismore ..	b	78	50	0
Maitland..	b	51	37	0
Marsdens	u	63	38	0·24
Menindie	b	63	40	0
Molong ..	r	46	36	0·33
Moree	b	75	43	0
Moruya ..	b	58	42	0
Moss Vale	n	51	39	0·03
M. Victoria	b	51	34	0·08
Mudgee ..	u	72	20	0·12
Murrumbh	u	54	41	0·43
Murr'r'ndi	c	58	36	0
Mus'lbrook	b	61	37	0
Narrabri ..	b	66	33	0
Newcastle	b	60	42	0
Nowra	-	—	—	—
Orange ..	u	49	25	0·51
Picton	-	—	—	—
P.M'quarie	b	67	45	0
P.Stephens	b	74	43	0
Qu'nbeyan	b	52	31	0·34
Quirindi ..	b	72	36	0
Singleton	u	63	37	0
SYDNEY ..	b	59	46	0
Tamworth	c	61	37	0
Taralga ..	b	66	32	0·28
Taree	b	63	44	0·02
T'nt'rfield	b	64	26	0
Wagga....	u	64	29	0·51
Walcha ..	c	57	36	0
Walgett ..	b	—	37	0
Wentw'rth	b	68	34	0·18
Wilcannia	b	—	—	0
Woll'ng ng	b	64	49	0
Young ..	d	73	30	0·52

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 10 .....32·810
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for bright sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; o, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and dull, fresh S.W. winds and rough sea on S. coast; calm and raining at Perth. Rainfall:—Perth, 0·08; Albany, 0·28; Esperance Bay, 0·30.

South Australia.—Weather generally dull and squally S. of Point Wakefield, fine north of Cape Borda and inland; light rains recorded inland to Hawker—average, 0·20 to 0·40; heavier at some stations—Quorn 0·91, Millicent 0·99; rough sea, strong N.W. and rising barometer on coast. Rainfall:—Streaky Bay, 0·29; Cape Borda, 0·58; Adelaide, 0·28; Robe, 0·59; M'Donnell Bay, 0·26.

Victoria.—Generally cloudy on coast, with strong N.W. to S.W. winds, rising barometers, and rough sea; fine inland at places. Rainfall:—Melbourne, 0·08; Portland, 0·30; Cape Otway, 0·12; Wilson's Promontory, 0·09; Lake Entrance, 0·07; Gabo, 0·02; Echuca, 0·55.

Tasmania.—Fine on N. coast, with fresh W.S.W. wind.

New Zealand.—Russel, bar. 30·10, wind E., light; Wellington, bar. 30·20, wind E., light; Bluff, bar. 30·10, calm. Weather generally fine and clear.

New South Wales.—Generally fine and clear; cloudy on the eastern slopes of mountains. For details see map above. Smooth sea, strong westerly winds, falling barometers, and very cloudy weather on coast. Kiandra reports seven inches of snow. Moruya, weather dull, rain 0·42 (fell on 9th in a few minutes), and Gundaroo, weather clearing, rain since Saturday, 0.36.

Queensland.—Generally fine and clear; sea moderate; winds S.W. to S.E; no rain; sea very smooth at Cooktown and Townsville.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 18, fine, barometers falling, temperature 55°; Cape Otway, N.N.W., 12, squally, rough, temperature 54°, upper clouds from N.W.; Portland, N.N.W., 50, showery, smooth sea, temperature 54°; Wilson's Promontory, W. 24, squally, sea moderate, temperature 53°.

New South Wales.—Albury, S.W., fine, temperature 52°; Cape St. George, W., 56, fine, sea smooth, temperature 60°; Clarence River, N.W., 28, fine; Dubbo, W., 14, stormy, temperature 50°; Forbes, W., 14, cloudy, temperature 58°; Goulburn, N.W., fine, temperature 52°; Menindie, N.W., fine, temperature 52°; Moruya, S.W., 28, fine smooth sea, temperature 62°; Port Macquarie, W.S.W., fine, sea smooth, temperature 67°; Sydney, W.S.W., 42, fine, smooth sea, temperature 59°; Wentworth, calm, fine, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 11 inches above summer level; at Hay, 2 feet 4 inches above summer level; at Balranald, 1 foot 7 inches above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 5 feet 6 inches above summer level. Darling: At Wentworth, 5 feet 2 inches above summer level; at Pooncarie, low; at Menindie, 1 foot above summer level; at Wilcannia, 2 feet 6 inches above summer level; Bourke, low.

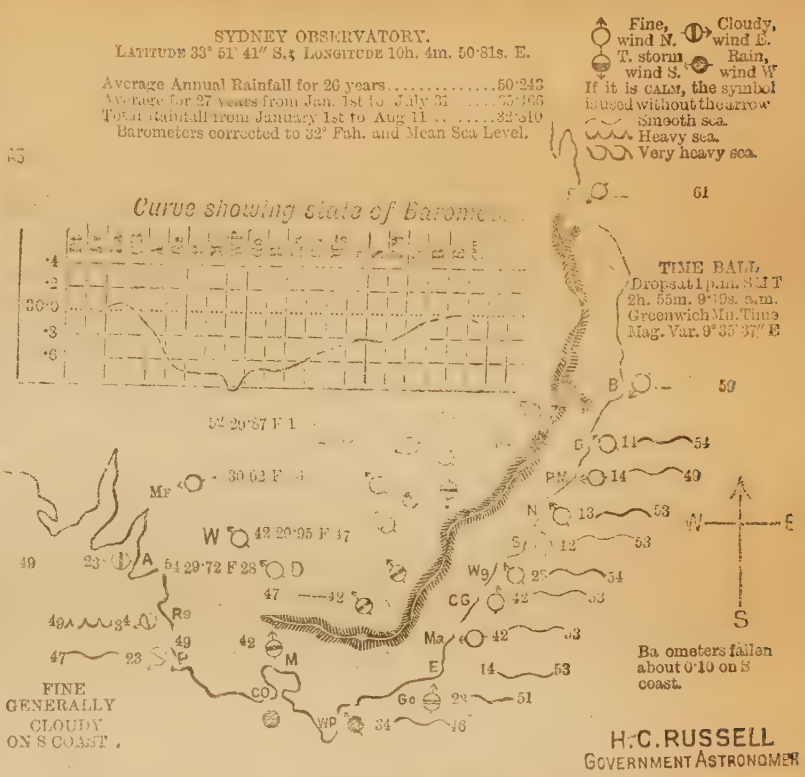
ASTRONOMICAL MEMORANDA FOR AUGUST 11.

Sun rises at 6.45, sets at 5.26; Moon, 7.1 a.m., 6.5 p.m.; Mercury, 7.52 a.m., 7.34 p.m.; Venus, 8.5 a.m., 7.28 p.m.; Mars, 4.17 a.m., 2.1 p.m.; Jupiter, 7.54 a.m., 7.12 p.m.; Saturn, 4.0 a.m., 1.54 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 11: 8.42 a.m., 9.5 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 11, 1885.

Stations	Wt	Mx	Mn	R'in
Albury	u	54	44	0·12
Armidale	n	56	43	0
Balranald	c	62	35	0·01
Bathurst	c	75	57	0
Beaudesert	n	49	22	0
Bodalla	b	66	28	0
Bourke	b	67	39	0
Camd'n H.	b	64	41	0
C. St. Geo.	b	62	45	0
Carcoar	b	45	35	0·07
Casino	b	75	28	0
Cassilis	b	59	34	0
Clarence	b	75	47	0
Condob'lin	c	68	35	0
Cooma	g	37	2	0
Coraki	n	[illegible]	[illegible]	0
Corowa	b	[illegible]	[illegible]	0
Cowra	u	51	48	0
Deniliquin	c	[illegible]	[illegible]	0
Dubbo	c	57	35	0
Eden	[illegible]	[illegible]	[illegible]	[illegible]
Forbes	u	—	7	0
Grafton	[illegible]	52	24	0
Grenfell	c	48	[illegible]	0
Gunnedah	c	52	35	0
Hay	[illegible]	[illegible]	[illegible]	[illegible]
Inverell	b	57	40	0
Jerilderie	u	—	—	0
Kiandra	b	36	24	0
Kiandra	s	40	26	0
Lismore	b	75	41	0
Maitland	b	70	38	0
Marsdens	b	57	43	0
Menindie	b	64	50	0
Molong	n	54	30	0
Moree	b	68	34	0
Moruya	c	66	45	0
Moss Vale	b	47	36	0
M. Victoria	b	46	32	0
Mudgee	n	59	21	0
Murrumbidgee	c	56	35	0·02
Murr'r'ndi	b	52	39	0
Musbrook	b	52	34	0
Narrabri	b	67	34	0
Newcastle	b	65	45	0
Newry	—	—	—	—
Orange	g	49	26	0
Picton	b	54	35	0
Port Macquarie	b	63	37	0
Port Stephens	b	77	44	0
Queanbeyan	u	50	38	0
Quirindi	n	71	30	0
Singleton	b	59	46	0
SYDNEY	b	60	47	0
Tenterfield	b	76	26	0
Taralga	n	59	33	0
Taree	b	66	26	0
Tent'rfield	b	57	29	0
Wagga	c	56	33	0
Walcha	b	56	24	0
Walgett	b	—	34	0
Wentw'rth	b	63	39	0·09
Wilcannia	c	—	—	0
Woll'ng'ng	b	63	45	0
Young	c	73	32	[illegible]



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b [illegible] or blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; [illegible] mist; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind is symbolised like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state [illegible] figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, P[illegible] Albany; Eu, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of the weather is shown in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Weather generally cloudy; heavy rain falling at Perth; [illegible] smooth. Rainfall—Perth, 0·16; Esperance Bay, 0·06.

South Australia.—Generally dull; showery S. of Port Augusta; squally on coast, with rough sea; strong W. winds and rising barometers; heavy rain falling over Mount Lofty Ranges. Rain recorded inland to Quorn, heaviest (0·80 to 1·50) over Mount Lofty Ranges, 0·20 to 0·60 N. of Adelaide, and 0·70 to 1·30 in S.E.; winds generally strong from [illegible] to [illegible]. 0·02; Streaky Bay, 0·12; Adelaide, [illegible] Robe, 0·73; and M'Donnell Bay, 1·12. Squally with [illegible] Cape Borda; rain at 9 a.m., 0·44; sea rough, wind S.W.

Victoria.—Cloudy generally; showery in places on coast, with fresh N.W. winds, falling barometers, and moderate sea. (Rough at Cape Otway). Dull inland at Echuca, with strong N. wind. Rainfall—Portland, 0·82; Cape Otway, 0·11; Wilson's, 0·11.

Tasmania.—Raining heavily on N. coast, with strong N. wind. Rainfall at Low Heads, 0·42.

New Zealand.—Russell, bar. 30·10, wind [illegible]; Wellington, bar. 30·10, wind E.; Bluff, bar. 30·00, calm. Weather generally fine and clear.

New South Wales.—Generally fine and clear; still cloudy and unsettled in places on western slopes of mountains. Snowing at Kiandra (3 inches fallen at 9 a.m.) (Details in map above.) Smooth sea, fresh N.W. wind, steady barometers, and very clear weather on coast.

Queensland.—Fine and clear generally, with light S.W. to S.E. winds, and moderate sea. Light rain falling at Townsville; sea [illegible]. [illegible] reported.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W.S.W., 18, fine, temperature 53°; Cape Otway, W., 13, showery, rough sea, temperature 52°; Portland, S.W., 34, showery, smooth sea, temperature 53°; Wilson's Promontory, W., 40, showery, moderate sea, temperature 47°.

New South Wales.—Albury, N.W., 42, fine, rising, temperature 52°; Cape St. George, W., 56, fine, smooth sea, temperature 61°; Clarence River, N.E., fine, smooth sea, temperature 65°; Deniliquin, S.W., 42, fine, temperature 54°; Dubbo, N.W., 28, fine, temperature 51°; Eden, W., 28, fine, smooth sea, temperature 61°; Forbes, W., 28, threatening, temperature 53°; Goulburn, N.W., 42, fine, temperature 52°; Menindie, S.W., cloudy, temperature 60°; Moruya, W.N.W., 42, fine, smooth sea, temperature 62°; Newcastle, W., 42, fine, smooth sea, temperature 68°; Port Macquarie, N.N.E., 28, fine, smooth sea, temperature 67°; Sydney, W., 24, fine, smooth sea, temperature 61°; Wentworth, S., cloudy, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 11 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 1 foot 8 inches above summer level. Murray: At Albury, 1 foot 6 inches above summer level; at Euston, 5 feet 3 inches above summer level. Darling: At Wentworth, 5 feet above summer level; at Pooncarie, low; at Menindie, 1 foot 2 inches above summer level; at Wilcannia, 2 feet above summer level; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 12.

Sun rises at 6.44, sets at 5.26; Moon, 7.46 a.m., 7.12 p.m.; Mercury, 7.49 a.m., 7.34 p.m.; Venus, 8.4 a.m., 7.31 p.m.; Mars, 4.16 a.m., 2 p.m.; Jupiter, 7.51 a.m., 7.9 p.m.; Saturn, 3.56 a.m., 1.50 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 12: 9.26 a.m., 9.47 p.m.

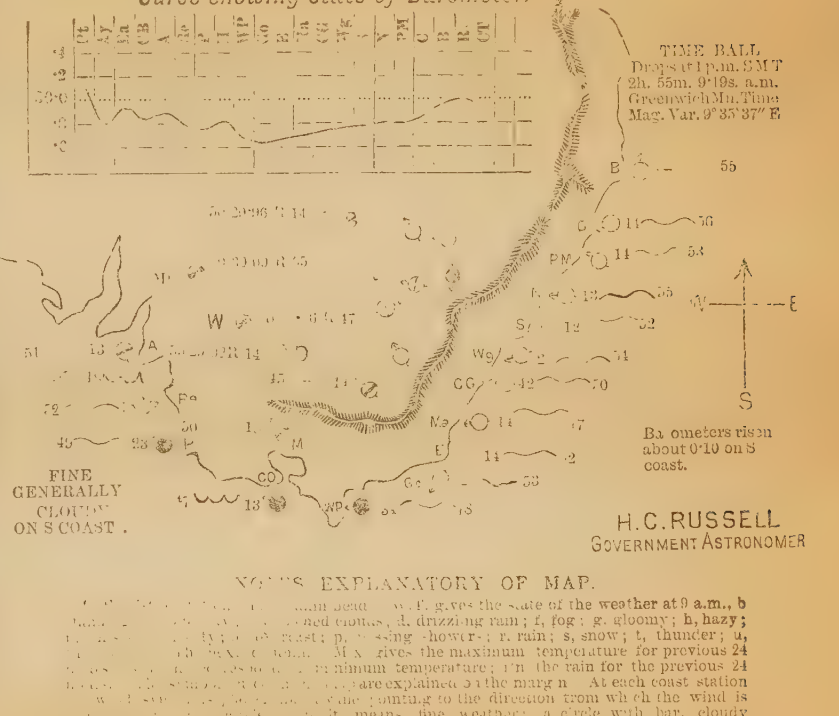
METEOROLOGICAL REPORTS AND MAP FOR AUGUST 12, 1885.

Stations	wt	Mx	Mn	R'in
Moury ..	u	51	42	0·20
Armidale	b	58	37	0
Balranald	g	63	36	0·03
Bathurst..	u	51	34	0·15
Bend'meer	-	—	—	—
Bodalla ..	b	51	32	0
Bourke ..	b	69	37	0
Camd'n H.	-	—	—	—
C. St. Geo.	b	62	42	0
Carcoar ..	s	47	39	0·41
Casino	b	78	37	0
Cassilis .	b	55	41	0
Clarence ..	b	74	48	0
Condob'lin	u	47	31	0
Cooma .	[illegible]	[illegible]	[illegible]	[illegible]
Cootamun.	b	63	25	0
Cootamundra	b	—	—	0
Cowra .	r	[illegible]	[illegible]	[illegible]
Deniliquin	[illegible]	[illegible]	[illegible]	[illegible]
Dubbo .	b	[illegible]	31	[illegible]
Eden	b	[illegible]	[illegible]	0
Euston ..	g	[illegible]	[illegible]	[illegible]
Forbes .	u	[illegible]	[illegible]	0
Glen Innes	-			
Goulburn	c	51	32	[illegible]
Gr[illegible]	[illegible]	[illegible]	41	0
[illegible]		57		
Gunnedah	b	61	35	0
Hay . ..	g	57	[illegible]	0
Hill End	c	—	—	0·17
Inverell .	b	[illegible]	[illegible]	0
Kiandra ..	s	[illegible]	27	0
Lismore .	-		—	—
Maitland..	b	63	47	0
Marsdens	u	58	45	0·08
Merindie	b	65	41	0
Molong ..	o	54	35	0·13
Moree	b	70	35	0
Moruya ..	b	63	47	0
Moss Vale	b	47	26	0·17
M. Victoria	c	48	33	0
Mudgee ..	c	59	27	0·01
Murrumbh	c	55	40	0·29
Murr'rndi	b	55	42	0
Mus'lbrook	b	67	42	0
Narrabri ..	b	67	37	0
Newcastle	b	67	49	0
Nowra	-	—	—	—
Orange ..	r	45	34	0·45
Picton	b	59	42	0·01
P.M'quarie	b	68	39	0
P.Stephens	b	75	45	0
Qu'nbeyan	c	48	32	0·13
Quirindi ..	b	62	30	0
Singleton	b	63	49	0
SYDNEY ..	b	63	48	0
Tamworth	b	61	31	0
Taralga ..	b	53	31	0·40
Taree	b	67	42	0
Tn'r'field	-	—	—	—
Wagga....	-	—	—	—
Walcha ..	-	—	—	—
Walgett ..	b	—	37	0
Wentw'rth	c	60	44	0
Wilcannia	c	-	—	0
Woll'ng'ng	b	69	45	0
Young .	u	75	37	0·27

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 .....35·466
Total Rainfall from January 1st to Aug 12 .. ..32·810
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E.
T. storm wind S. Rain, wind W.
If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



NOTES EXPLANATORY OF MAP.

[illegible] gives the state of the weather at 9 a.m., b [illegible] cloudy, d, drizzling rain; f, fog; g, gloomy; h, hazy; [illegible] shower; r, rain; s, snow; t, thunder; u, [illegible] gives the maximum temperature for previous 24 [illegible] minimum temperature; r in the rain for the previous 24 [illegible] are explained in the margin. At each coast station [illegible] pointing to the direction from which the wind is [illegible] it means fine weather; a circle with bar, cloudy [illegible] rain. Next to this symbol are placed figures denoting [illegible] per hour; next, a symbol showing the state [illegible] denoting the shade temperature at 9 a.m. The barometer [illegible] round the coast from Perth to Cooktown:—[illegible], Perth, [illegible], CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Mendindie, Mf. Inland the state of barometer is given at Wagga, Deniliquin, Wentworth, Bourke, and Alice [illegible] barometer curve enables one at a glance to trace the depressions, [illegible] and passing along eastwards; northerly winds preceding [illegible] and [illegible] following.

Western Australia.—Generally cloudy, with light variable winds and smooth sea. Rainfall—Perth, 0·08; Albany, 0·35; Esperance Bay, 0·03.

South Australia reports weather generally dull S. of Farina; showery over Mount Lofty Ranges and on coast; light rains recorded S. of Barra, heaviest at Gunnerachu 0·40, Crafers 0·35; winds N.W. to W., strong in places; rough sea and steady barometers on coast. Rainfall—Streaky Bay, 0·12; Borda, 0·09; Adelaide, 0·09; Robe, 0·12; M'Donnell Bay, 0·03.

Victoria.—Generally cloudy; moderate sea, rising barometers, fresh N.W. winds and cloudy; showery weather on coast; cloudy and dull inland at Echuca; fine and clear at Omeo. Rainfall—Melbourne, 0·16; Portland, 0·19; Cape Otway, 0·16; Wilson's, 0·42; and Omeo, 0·14.

Tasmania.—Fine and clear, with light W. wind on N. coast. Rainfall—Low Heads, 0·07.

New Zealand.—Russell, bar. 29·90, wind N.E., showery; Wellington, bar. 30·00, wind E., fine and clear; Bluff, bar. 29·80, wind N.E., fine and clear. Winds light.

New South Wales.—Generally fine and clear; cloudy on mountains and their western slopes, an S.W. near Victorian border; very fine and clear on coast, with light westerly winds, rising barometers, and smooth sea. Temora reports weather dull, rain 0·24; Gundaroo reports weather very cloudy, rain 0·22, barometer still rising. Further details in map above.

Queensland Fine and clear on E. coast, with S.W. and S.E. winds and moderate sea; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W.N.W., 13, fine but cloudy, temperature 53°; Cape Otway, N.W., 13, showery, slight sea; Wilson's Promontory, W., 34, showery, slight sea, temperature 47°; Portland, W.N.W., 28, cloudy, slight sea, temperature 54°.

New South Wales.—Albury, N.W., cloudy, temperature 52°; Cape St. George, W., 56, fine, smooth sea, temperature 60°; Dubbo, S.W., 14, fine, but cloudy, temperature 52°; Eden, S.W., 14, fine, smooth sea, temperature 61°; Forbes, W., fine, temperature 50°; Goulburn, N.W., fine, temperature 53°; Menindie, variable, 14, fine, temperature 58°; Moruya, W., 28, fine, smooth sea, temperature 64°; Newcastle, W., 14, fine, smooth sea, temperature 65°; Port Macquarie, S.S.E., 28, fine, smooth sea, temperature 65°; Sydney, W.N.W., 8, fine, smooth sea, temperature 62°; Wentworth, N.W., 14, dull, temperature 50°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 3 inches above summer level; at Hay, 1 foot 9 inches above summer level; at Balranald, 1 foot 9 inches above summer level. Murray: At Albury, 1 foot 6 inches above summer level; at Euston, 5 feet 1 inch above summer level. Darling: At Wentworth, 4 feet 10 inches above summer level; at Pooncarie, low; at Menindie, 1 foot 4 inches above summer level; at Wilcannia, 1 foot 8 inches above summer level; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 13.

Sun rises at 6.43, sets at 5.27; Moon, 8.27 a.m., 8.17 p.m.; Mercury, 7.46 a.m., 7.34 p.m.; Venus, 8.3 a.m., 7.33 p.m.; Mars, 4.15 a.m., 1.59 p.m.; Jupiter, 7.47 a.m., 7.6 p.m.; Saturn, 3.53 a.m., 1.47 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 13: 10.7 a.m., 10.27 p.m.

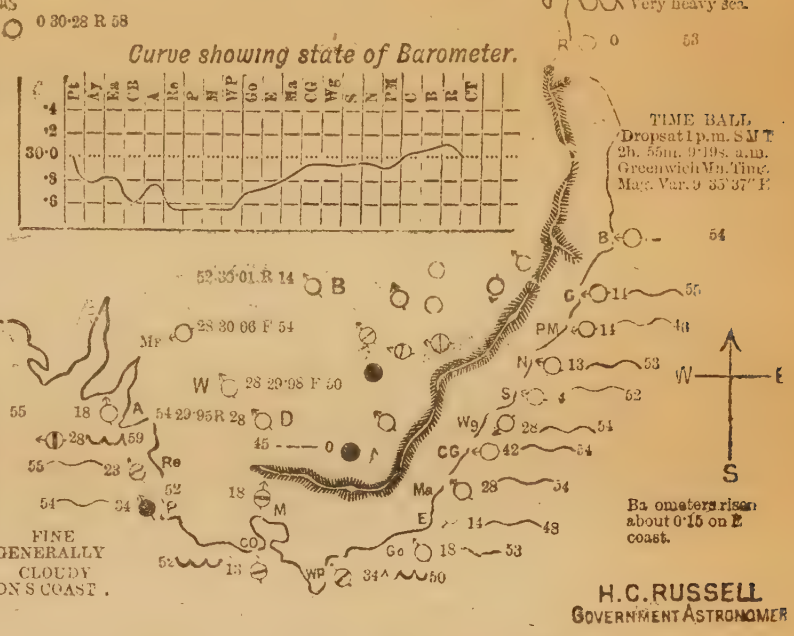
METEOROLOGICAL REPORTS AND MAP FOR AUGUST 13, 1885.

Stations	W.T.	M'x	M'n	R'in
Albury ..	r	52	44	0·12
Armidale	b	59	34	0
Balranald	b	58	36	0
Bathurst ..	g	50	30	0
Bend'meer	n	55	24	0
Bodalla ..	b	69	30	0
Bourke ..	c	69	36	0
Camd'n H.	b	66	43	0
C. St. Geo.	b	63	43	0
Carcoar ..	g	47	41	0·67
Casino	b	70	31	0
Cassilis ..	c	55	36	0
Clarence ..	b	75	48	0
Condob'lin	c	49	31	0
Cooma	n	56	26	0
Coonab'n.	b	63	22	0
Coonamble	b	—	—	0
Cowra	-	—	—	—
Deniliquin	b	56	41	0
Dubbo ..	g	61	29	0
Eden	b	62	44	0
Euston ..	b	58	31	0
Forbes....	g	—	41	0
Glen Innes	b	57	28	0
Goulburn	b	51	36	0
Grafton ..	b	83	42	0
Gunnedah	-	—	—	—
Hay	b	54	42	0
Hill End	n	—	—	0
Inverell ..	b	56	28	0
Kiandra ..	f	40	27	0
Lismore ..	b	74	37	0
Maitland ..	b	62	48	0
Marsdens	c	57	46	0
Menindie	b	64	45	0
Molong ..	o	54	34	0
Moree	b	71	32	0
Moruya ..	b	59	41	0
Moss Vale	c	48	37	0
M. Victoria	b	47	34	0
Mudgee ..	g	62	30	0
Murrumbh	c	54	42	0·02
Murr'r'ndi	b	56	38	0
Mus'lbrook	o	67	38	0
Narrabri ..	b	63	33	0
Newcastle	b	66	43	0
Nowra	-	—	—	—
Orange ..	g	44	36	0
Picton	b	59	47	0
P.M'quarie	b	65	36	0
P.Stephens	b	79	46	0
Qu'nbeyan	b	50	37	0
Quirindi ..	c	63	34	0
Singleton	b	62	48	0
SYDNEY ..	b	63	43	0
Tamworth	c	62	28	0
Taralga ..	g	50	36	0
Taree	-	—	—	—
T'nt'rfield	b	58	25	0
Wagga....	-	—	—	—
Walcha ..	-	—	—	—
Walgett ..	b	—	40	0
Wentw'rth	b	60	43	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	64	45	0
Young ..	p	63	39	0·02

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 13 .. ..32·810
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E. — T. storm wind S. — Rain, wind W. If it is CALM, the symbol is used without the arrow. — Smooth sea. — Heavy sea. — Very heavy sea.



NOTES EXPLANATORY OF MAP.

In the list of stations, the column headed W.T. gives the state of the weather at 9 a.m., b bending for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible] at column. M'x gives the maximum temperature for previous 24 [illegible] M'n, corresponding minimum temperature; R'in the rain for the previous 24 [illegible] The symbols used in the map are explained on the margin. At each coast station [illegible] is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown—Pt., Perth; Ay., Albany; Ea., Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W.P., Wilson's Promontory; Go, Gabo; E., Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P.M., Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light variable winds and smooth sea. Rough at Albany. Rainfall—Albany, 0·09; Perth, 0·05.

South Australia.—Generally fine inland, with scattered clouds; cloudy in S.E. and over Mount Lofty Range; squally from W. and N.W., with falling barometers and rough sea on coast; winds generally fresh, and varying from N. to N.W. Rainfall—Streaky Bay, 0·19; Cape Borda, 0·17; Robe, 0·50; and M'Donnell Bay, 0·05.

Victoria.—Cloudy on coast, with northerly winds, falling barometers, and rough sea. Fine, but cloudy inland. Rainfall—Portland, 0·05; Cape Otway, 0·09; Wilson's Promontory, 0·33.

Tasmania.—Showery on N. coast, and squally from W.N.W. Rainfall—Low Heads, 0·28.

New Zealand.—Russell, bar. 29·80, wind N.W., dull and showery; Wellington, bar. 29·70, wind calm, dull; Bluff, bar. 29·70, wind N.E., calm.

New South Wales.—Generally fine and clear; still cloudy in places beyond mountains. Showery at Young. (Full details in map above.) Smooth sea, rising barometers; light to fresh westerly winds and very clear weather prevail on coast. Temora reports weather fine; rain 0·02.

Queensland.—Generally fine and clear, with S.W. and S.E. winds and moderate sea; dull at Cooktown. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 18, dull, temperature 58°; Cape Otway, N.N.W., 13, showery, misty, rough sea, temperature 55°; Portland, N.W., 40, squally, showery, smooth sea, temperature 57°; Wilson's Promontory, N.W., 34, cloudy, rather rough sea, temperature 57°.

New South Wales.—Albury, N.W., fine but cloudy, temperature 56°; Cape St. George, W.S.W., 42, fine, smooth sea, temperature 64°; Clarence River, N.E., 14, fine, smooth sea, temperature 66°; Deniliquin, N.W., fine, temperature 61°; Dubbo, W., 14, fine, temperature 55°; Eden, N., 28, fine, slight sea, temperature 65°; Forbes, calm, fine, temperature 55°; Menindie, N.W., 49, fine, temperature 62°; Moruya, N.E., 26, fine, smooth sea, temperature 58°; Newcastle, W., fine, smooth sea, temperature 64°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 65°; Sydney, W.N.W., 8, fine, smooth sea, temperature 63°; Wentworth, N.W., fine, temperature 56°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 1 inch above summer level; at Hay, 1 foot 9 inches above summer level; at Balranald, 2 feet 2 inches above summer level. **Murray:** At Albury, 1 foot 6 inches above summer level; at Euston, 1 foot above summer level. **Darling:** At Wentworth, 4 feet 8 inches above summer level; at Pooncarie, low; at Wilcannia, 1 foot 6 inches above summer level; at Bourke, low.

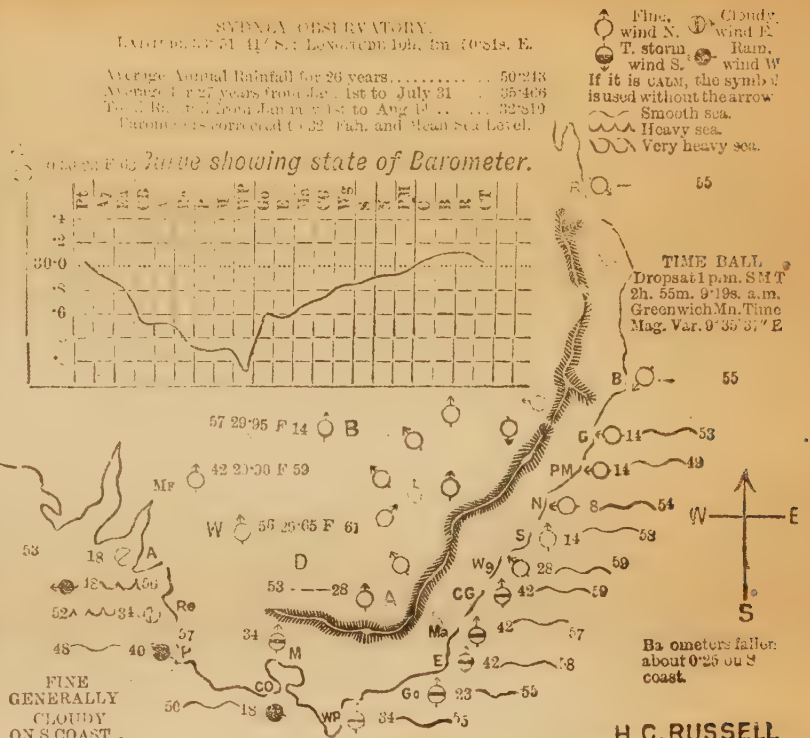
ASTRONOMICAL MEMORANDA FOR AUGUST 14.

Sun rises at 6.41, sets at 5.28; **Moon**, 9.5 a.m., 9.19 p.m.; **Mercury**, 7.44 a.m., 7.34 p.m.; **Venus**, 8.3 a.m., 7.35 p.m.; **Mars**, 4.13 a.m., 1.59 p.m.; **Jupiter**, 7.44 a.m., 7.2 p.m.; **Saturn**, 3.49 a.m., 1.43 p.m. **New moon, 10th; full moon, 26th.**

High water at Fort Denison, August 14: 10.46 a.m., 11.5 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 14, 1885.

Stations	wt	Mx	m	r
Albany	c	61	46	0·04
Adelaide	b	60	31	0
Balranald		—	—	—
Bathurst	b	58	27	0
Bend'mere	n	55	23	0
Bodalla	c	68	43	0
Bourke	b	75	17	0
Camd'n H.	b	63	41	0
C. St. Geo.	c	63	52	0
Carcoar	b	49	28	0
Casino	b	78	34	0
Cassilis	b	57	35	0
Clarence	b	75	48	0
Condob'lin	b	55	33	0
Cooma	c	56	43	0
Coonab'n.	n	65	22	0
Coonamble	b	—	—	0
Cowra	b	60	51	0
Deniliquin	—	—	—	—
Dubbo	b	67	27	0
Eden	g	60	48	0
Euston	—	—	—	—
Forbes	b	—	40	0
Glen Innes	b	60	27	0
Goulburn	b	54	40	0
Grafton	b	81	39	0
Gunnedah	b	63	36	0
Hay	g	67	47	0
Hill End	b	—	—	0
Inverell	n	57	41	0
Kiandra	c	39	28	0
Lismore	b	75	32	0
Maitland	b	62	43	0
Marsdens	b	65	45	0
Menindie	b	72	50	0
Molong	b	60	32	0
Moree	b	74	36	0
Moruya	c	65	58	0
Moss Vale	b	51	37	0
M. Victoria	b	49	37	0
Mudgee	n	67	22	0
Murrumbh'	b	50	39	0
Murr'r'ndi	b	58	43	0
Mus'lbrook	b	66	38	0
Narrabri	b	60	31	0
Newcastle	b	67	49	0
Nowra	b	67	48	0
Orange	n	48	32	0
Picton	b	63	38	0
P.M'quarie	b	63	38	0
P.Stephens	b	79	42	0
Qu'nbeyan	b	52	39	0
Quirindi	n	65	33	0
Singleton	b	63	44	0
SYDNEY	b	63	50	0
Tamworth	b	62	29	0
Taralga	b	55	38	0
Taree	—	—	—	—
Tnt'rfield	b	62	30	0
Wagga	c	60	37	0
Walcha	—	—	—	—
Walgett	b	—	38	0
Wentw'rth	c	73	49	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	67	51	0
Young	b	66	35	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

[illegible] gives the state of the weather at 9 a.m., b [illegible] d, drizzling rain; f, fog; g, gloomy; h, hazy; [illegible] misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible] the next column. M x gives the maximum temperature for previous 24 hours. M n the corresponding minimum temperature; r n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pe, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy on S. coast, with strong W. winds and rough sea; southerly winds and calm on W. coast. Rainfall—Albany, 0·40; Perth, 0·07; Esperance Bay, 0.23.

South Australia reports weather generally dull and showery inland to Quorn; squally on parts of coast from N.W. and S.W., varying from 28 to 34 miles per hour in velocity; rough sea and falling barometers on coast. Rain recorded S. of Laura, heaviest over Mount Lofty Ranges (0·30 to 0·5) and in S.E. (0·40 to 0·50). Rainfall reports—Eucla, 0·03; Streaky Bay, 0·05; Robe, 0·20; M'Donnell Bay, 0·49.

Victoria.—Cloudy and showery on coast, with strong northerly and westerly winds and very low barometers—(see barometic curve in map); sea slight and moderate; fine but cloudy inland at Omeo; strong wind, in squalls, at Melbourne. Heavy rain falling at Portland; squally, misty, and showery at Cape Otway; upper clouds moving from W. at Lake Entrance, with N.E. wind. Rainfall—Portland, 0·49; Cape Otway, 0·06.

Tasmania.—Showery on N. coast, with strong N.N.W. wind, blowing 56 miles per hour; barometer at Low Heads, 29·18. Rain, 0·18.

New Zealand.—Russell, bar. 29·90, wind N.W., fine; Wellington, bar. 29·50, wind N.W., squally, rain 0·07; Bluff, bar. 29·50, wind S.W., fine.

New South Wales.—Fine and very clear throughout, smooth sea, falling barometers, and light to fresh N.W. and N. winds on coast. Northerly winds, falling barometers, and clear weather inland. (For details see map above.)

Queensland.—Fine and very clear on E. coast, with S.W. to S.E. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers rising. Melbourne, N.W., 18, cloudy, temperature 55°; Cape Otway, W.N.W., 28, fine, smooth sea, temperature 49°; Portland, W.N.W., 48, fine, smooth sea, temperature 53°; Wilson's Promontory, line interrupted.

New South Wales.—Albury, N.W., 42, threatening, temperature 60°; Cape St. George, N.W., 56, fine, smooth sea, temperature 70°; Clarence River, N.E., fine, smooth sea, temperature 68°; Deniliquin, N.W., 42, fine, temperature 65°; Dubbo, N.W., 56, fine, with dust storm, temperature 57°; Eden, N.W., 42, fine, smooth sea, temperature 71°; Forbes, W., 42, fine, temperature 66°; Goulburn, N.W., 42, fine, temperature 58°; Menindie, N., 56, dull, temperature 84°; Newcastle, N.W., 42, fine, smooth sea, temperature 69°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 69°; Sydney, N.N.W., 25, fine, smooth sea, temperature 69°; Wentworth, N., 42, dull, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level. Murray: At Albury, 1 foot 7 inches above summer level. Darling: At Wentworth, 4 feet 7 inches above summer level; at Pooncarie, 3 inches above summer level; at Menindie, 1 foot 5 inches above summer level; at Wilcannia, 1 foot 5 inches above summer level.

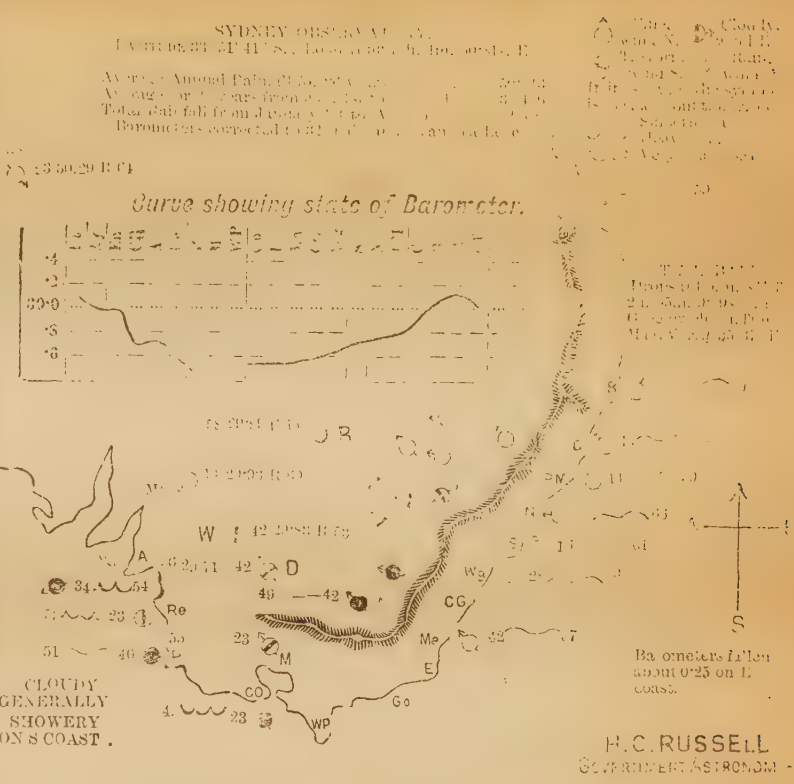
ASTRONOMICAL MEMORANDA FOR AUGUST 15.

Sun rises at 6.42, sets at 5.28; Moon, 9.42 a.m., 10.20 p.m.; Mercury, 7.40 a.m., 7.32 p.m.; Venus, 8.2 a.m., 7.37 p.m.; Mars, 4.12 a.m., 1.58 p.m.; Jupiter, 7.41 a.m., 6.59 p.m.; Saturn, 3.46 a.m., 1.40 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 15: 11.25 a.m., 11.44 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 17, 1887.

Stations	wt	Mx	Mn	Rain
Albury	d	63	48	0·15
Armidale	b	67	43	0
Balranald	b	70	41	0
Bathurst	g	63	36	0
Bend'meer	b	61	29	0
Boda'lla	b	76	42	0
Bourke	b	81	48	0
Camd'n H.	—	—	—	—
C. St. Geo.	—	—	—	—
Carcoar	g	—	48	0
Casino	b	81	34	0
Cassilis	c	60	56	0
Clarence	b	77	53	0
Condob'lin	c	55	39	0
Cooma	g	65	36	0·60
Coonab'n.	b	68	33	0
Coonamble	u	—	—	0
Cowra	u	65	50	0
Deniliquin	c	68	42	0
Dubbo	b	71	45	0
Eden	—	—	—	—
Euston	c	68	45	0
Forbes	c	—	42	0
Glen Innes	q	56	34	0
Goulburn	g	63	41	0·05
Grafton	b	84	37	0
Gunnedah	b	63	42	0
Hay	b	71	41	0
Hill End	b	—	—	0
Inverell	b	62	40	0
Kiandra	s	45	30	0
Lismore	b	79	41	0
Maitland	b	64	50	0
Marsdens	c	70	46	0
Menindie	b	75	53	0
Molong	u	64	45	0
Moree	b	72	49	0
Moruya	c	73	50	0
Moss Vale	b	58	37	0
M. Victoria	b	52	40	0
Mudgee	b	68	31	0
Murrumbidg	c	68	47	0·04
Murr'r'ndi	b	63	50	0
Mus'lbrook	b	69	47	0
Narrabri	b	66	34	0
Newcastle	b	70	54	0
Nowra	b	—	—	0
Orange	g	54	39	0
Picton	c	65	44	0
P.M'quarie	b	66	50	0
P.Stephens	b	81	41	0
Qu'nbeyan	r	59	43	0
Quirindi	b	71	37	0
Singleton	b	68	54	0
Sydney	g	70	59	0
Tamworth	b	69	33	0
Taralga	c	61	41	0
Taree	—	—	—	—
Tin't'rfield	b	65	40	0
Wagga	—	—	—	—
Walcha	b	59	26	0
Walgett	b	—	48	0
Wentw'rth	g	68	49	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	56	0
Young	u	64	40	0·01



NOTES EXPLANATORY OF MAP.

In the list of stations, the column headed wt gives the state of the weather at 9 a.m., by letters for blue sky, detached clouds, drizzling rain, fog, hazy, cloudy, overcast, passing shower, thunderstorm, snow, hailstorm, dust storm, cold, calm. Mx gives the maximum temperature, and Mn the minimum temperature, during the previous 24 hours. The symbols used in the map are explained in the margin. At each observing station the wind symbol is placed nearest to the point from which the wind is blowing. A clear circle with the arrow indicates a clear sky, a half-feathered arrow, cloudy weather, and a black spot, rain. Next to this symbol are placed figures denoting the number of miles per hour the wind is blowing per hour; to the right a symbol showing the state of the sky, and above it figures denoting the shade temperature of the air. The barometer curve shows the state of barometers round the coast from Port Darwin to Cooktown, Port Darwin, Albany, Eucla, Eucla, Cape Borda, Adelaide, Port Phillip, Port Fairy, Portland; Mount Gambier, Wilson's Promontory; Gabo, Eden, Sydney, Newcastle, Port Macquarie, Port Stephens, Clarence River, Brisbane, Rockhampton, Cooktown; Menindie, Mildura, and the state of barometer is given in figures for Albany, Denliquin, Wentworth, Hay, and Menindie. Arrows at the upper curve indicate the direction of the wind, and the lower curve indicates the state of the barometer, by letters, as Western Australia, passing showers, fresh breezes, light winds prevailing, and southerly to S.W.

Western Australia.—Cloudy and dull, with fresh westerly winds and moderate sea. Rainfall—Perth, 0·05; Esperance Bay, 0·10.

South Australia.—Cloudy and showery on coast; squally from N.W., with rough sea; fine inland in Central Australia and Northern Territory, with light S.E. winds and calms; barometers rising. Rainfall—Streaky Bay, 0·09; Cape Borda, 0·25; Adelaide, 0·42; and Robe, 0·21. Generally cloudy inland to Quorn; squally with winds 16 to 24 miles on the coast, from W. to S.W.; showery at many places inland, heaviest at Quorn 1·80; over Mount Lofty Ranges rain measured at Lobethal, 1.

Victoria.—Weather generally cloudy and squally; strong N.W. winds very prevalent; barometers very low, but rising; strong wind (N.W.) in squalls at Melbourne; showery on coast at Portland and Cape Otway, high sea at latter; thunderstorm in night at Portland; fine, but cloudy, inland at Echuca. Ranfall—Melbourne, 0·08; Portland, 0·85; Cape Otway, 0·51; Omeo, 0·35; and Echuca, 0·07.

Tasmania.—Dull and squally on N. coast, with strong N.W. wind, and very low barometer. Rainfall at Low Heads, 0·23. Barometers, 29·23.

New Zealand.—Russell bar. 30·10, wind calm; Wellington, bar. 29·70, wind N.W.; Bluff, bar. 29·60, N.W. Generally fine and clear.

Queensland.—Generally fine and clear, light S.E. and N.E. winds and smooth sea on E. coast. No rain.

New South Wales.—Generally cloudy inland, especially in southern parts. (For details see map above.) Smooth sea and falling barometers on coast. Strong westerly and N.W. winds very general. Barometers low in S.E. (See curve.) Temora reports weather like rain. Rainfall—0·06. Three feet of snow had fallen at Kiandra up to 9 a.m. The observer at Kiandra reports shower of mud there on Friday night.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, W.N.W., 24, squally, high sea; temperature 55°; Portland, W., 48, squally, with rain, smooth sea, temperature 52°; Wilson's Promontory, interrupted.

New South Wales.—Albury, N.W., 30, cloudy, temperature 56°; Clarence River, N.W., 40, fine, smooth sea, temperature 77°; Dubbo, N.W., 40, dust storm, cold, temperature 57°; Forbes, W., 40, clear, fine, temperature 57°; Goulburn, N.W., 20, fine, temperature 56°; Menindie, N.W., 40, cloudy, temperature 65°; Moruya, W.N.W., 40, fine, smooth sea, temperature 63°; Newcastle, N.W., 20, fine, smooth sea, temperature 76°; Port Macquarie, N.W., 14, fine, smooth sea, temperature 73°; Sydney, W.N.W., 20, fine, smooth sea, temperature 70°; Wentworth, N.W., 40, fine, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet above summer level; at Balranald, 2 feet 4 inches above summer level; Murray: At Albury, 2 feet above summer level; at Euston, 4 feet 10 inches above summer level. Darling: At Wentworth, 4 feet 6 inches above summer level; at Pooncarie, 5 inches above summer level; at Menindie, 1 foot 5 inches above summer level; at Wilcannia, 1 foot 6 inches above summer level; at Bourke, low.

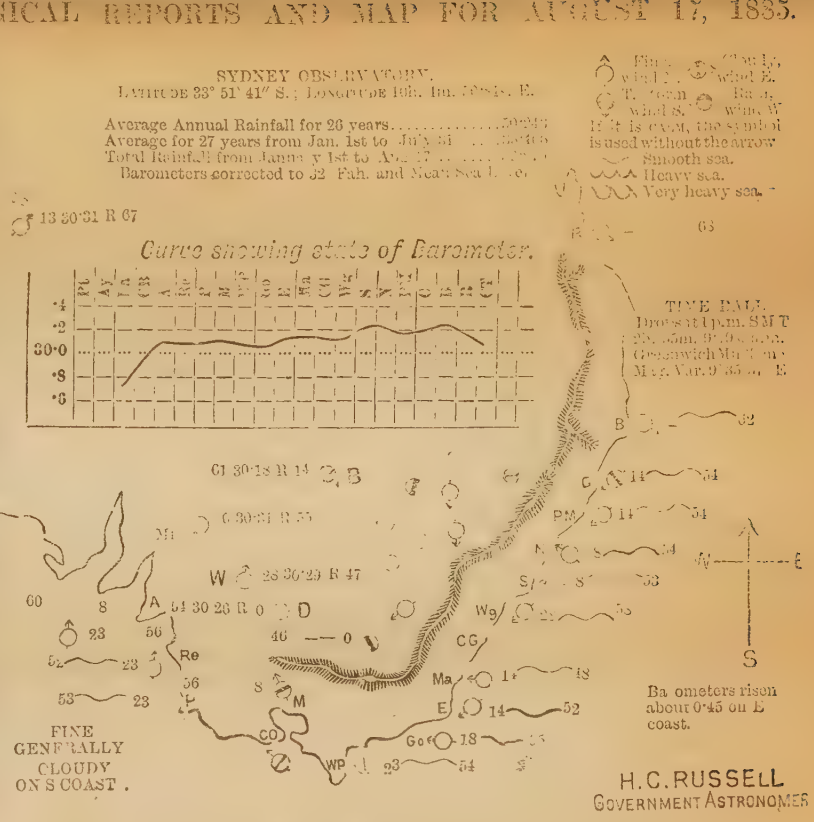
ASTRONOMICAL MEMORANDA FOR AUGUST 17.

Sun rises at 6.38, sets at 5.30; Moon, 11.0 a.m., —— p.m.; Mercury, 7.33 a.m., 7.27 p.m.; Venus, 8.0 a.m., 7.41 p.m.; Mars, 4.9 a.m., 1.56 p.m.; Jupiter, 7.34 a.m., 6.53 p.m.; Saturn, 3.89 a.m., 1.33 p.m. New moon, 10th; full moon, 25th.

High water at Fort Denison, August 17: 12.26 a.m., 12.49 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 17, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	c	57	45	0·35
Armidale	b	67	33	0
Balranald	b	70	32	0
Bathurst ..	b	60	[illegible]	0
Bend'meer	n	61	25	0
Bodalia .	b	62	30	0
Bourke ..	g	70	31	0
Cand'n H.	–	—	—	—
C. St. Geo.	–	—	—	—
Carcoar .	b	54	36	0
Casino	b	65	42	0
Cassilis .	b	62	38	0
Clarence ..	c	53	32	0
Condob'lin	b	47	31	0
Cooma ...	c	60	36	0
Coonab'n.	n	70	26	0
Coonamble	b	—	—	0
Cowra	b	64	48	0
Deniliquin	b	65	36	0
Dubbo .	b	72	31	0
Eden	b	59	46	0·01
Euston ..	b	68	33	0·12
Forbes ..	b	–	34	0
Glen Innes	b	55	32	0
Goulburn	b	59	33	0
Grafton ..	b	68	49	0
Gunnedah	–	—	—	—
Hay	b	65	41	0
Hill End	b	—	—	0
Inverell ..	b	[illegible]	15	0
Kiandra ..	c	43	20	0
Lismore ..	c	84	50	0
Maitland ..	b	68	42	0
Marsdens	n	65	41	0
Menindie	b	70	44	0
Molong ..	b	65	33	0
Moree	b	79	40	0
Moruya ..	b	66	39	0
Moss Vale	–	—	—	—
M. Victoria	b	55	31	0
Mudgee ..	n	77	25	0
Murrumbh	b	64	37	0
Murr'r'ndi	b	65	43	0
Mus'lbrook	b	72	33	0
Narrabri ..	b	68	35	0
Newcastle	b	74	47	0
Nowra	b	70	45	0
Orange ..	b	54	32	0
Picton	b	65	36	0
P.M'quarie	b	69	45	0
P.Stephens	b	81	42	0
Qu'nbeyan	b	57	38	0
Quirindi ..	b	72	35	0
Singleton	b	70	44	0
SYDNEY ..	b	68	47	0
Tamworth	b	68	33	0
Taralga ..	b	63	35	0
Taree	b	76	40	0
T'nt'rfield	c	67	34	0
Wagga....	c	61	41	0·05
Walcha ..	n	62	26	0
Walgett ..	u	—	41	0
Wentw'rth	b	68	39	0·02
Wilcannia	b	—	—	0
Woll'ng'ng	b	72	51	0
Young ..	b	78	35	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b. fine, fair, blue sky; c. detached clouds; d. drizzling rain; f. fog; g. gloomy; h. hazy; m. misty; n. frosty; o. overcast; p. passing showers; r. rain; s. snow; t. thunder; u. threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; rin the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind vane is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown, viz., Perth, Ay, Albany; E., Eucla; C.B. Cape Borda; A. Adelaide; Re, Robe; P. Portland; M. Melbourne, W P, Wilson's Promontory; Go, Gabo; E. Eden; Ma. Moruya; C G. Jervis Bay, Wg, Wollongong; S. Sydney; N, Newcastle; P M. Port Macquarie; C. Clarence River; B Brisbane; R. Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of the barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Esperance Bay reports fine clear weather, with fresh N.W. wind. No rain.

South Australia.—Reports weather generally fine and clear, with N.E. to N.W.; light rain recorded inland to Quorn, heaviest Mount Lofty Ranges (0·30 to 0·50); moderate sea, steady barometers, and fresh northerly winds on coast. Rainfall—Streaky Bay, 0·06; Cape Borda, 0·2; Adelaide, 0·10; Robe, 0·08; and M'Donnell Bay, 0·16.

Victoria.—Generally cloudy and dull on coast, with light northerly winds; rising barometers and moderate sea; fine inland at Echuca, and fine but cloudy at Omeo. Rainfall—Melbourne, 0·29; Portland, 0·22; Cape Otway, 0·04; Wilson's Promontory, 1·84, and Lake Entrance, 0.12.

Tasmania.—Fine on N. coast, with fresh W.N.W. wind and rising barometers. Rainfall—0·07 at Low Heads.

New Zealand.—Russell bar. 29·90, wind N.W.; Wellington, bar. 29·60, wind N.W.; Bluff, bar. 29·50, N.W. Fine and clear generally.

New South Wales.—Generally very fine and clear, with light N.W. and S.W. winds and calms; barometers rising. Smooth sea and very clear weather on coast, with light westerly winds. Details in map above.

Queensland.—Fine and clear on E. coast, with light S.E. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 18, fine, barometers falling, temperature 63°; Cape Otway, N., 6, fine, moderate sea, temperature 63°; Portland, N., 36, fine, smooth sea, temperature 63°; Wilson's Promontory, W.N.W., 18, fine, smooth sea, temperature 60°.

New South Wales.—Albury, S.W., cloudy, temperature 58°; Clarence River, S.E., 14, fine, smooth sea, temperature 71°; Deniliquin, calm, fine, temperature 55°; Dubbo, S.W., 14, fine, temperature 59°; Forbes, calm, fine and clear, temperature 55°; Goulburn, calm, fine, temperature 57°; Menindie, N., 28, fine, temperature 63°; Moruya, N.E., 28, fine, smooth sea, temperature 61°; Newcastle, N.W., 8, fine, smooth sea, temperature 68°; Sydney, N.E., 8, fine and clear, smooth sea, temperature 62°; Wentworth, N.N.E., 28, fine, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 6 inches above summer level; at Hay, 1 foot 9 inches above summer level; at Balranald, 2 feet 9 inches above summer level. Murray: At Albury, 2 feet 1 inch above summer level; at Euston, 4 feet 8 inches above summer level. Darling: At Pooncarie, 7 inches above summer level; at Menindie, 1 foot 5 inches above summer level; at Wilcannia, low; at Bourke, low.

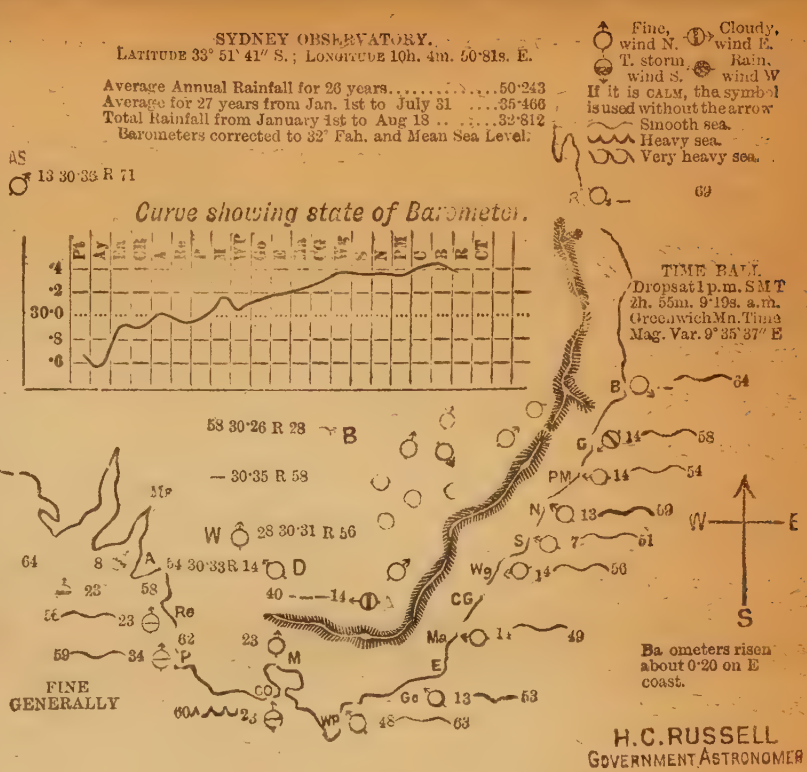
ASTRONOMICAL MEMORANDA FOR AUGUST 18.

Sun rises at 6.37, sets at 5.31; Moon, 11.41 a.m., 12.16 p.m.; Mercury, 7.30 a.m., 7.24 p.m.; Venus, 8.0 a.m., 7.42 p.m.; Mars, 4.8 a.m., 1.55 p.m.; Jupiter, 7.31 a.m., 6.50 p.m.; Saturn, 3.35 a.m., 1.29 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 18: 1.11 a.m., 1.39 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 18, 1885.

Stations	wt	M'n	m'n	R'in
Albury ..	n	64	40	0
Armidale	b	61	36	0
Balranald	b	80	37	0
Bathurst ..	b	66	27	0
Bend'meer	n	64	24	0
Bodalla ..	b	71	29	0
Bourke ..	b	78	49	0
Camd'n H.	b	70	51	0
C. St. Geo.	-	—	—	—
Carcoar ..	b	52	37	0
Casino	b	80	34	0
Cassilis .	b	61	32	0
Clarence ..	b	80	54	0
Condob'lin	b	50	31	0
Cooma ...	n	66	24	0
Coonab'n.	n	72	26	0
Coonamble	b	—	—	0
Cowra	b	63	53	0
Deniliquin	b	72	38	0
Dubbo ..	b	74	22	0
Eden	-	—	—	—
Euston ..	b	78	39	0
Forbes ...	b	—	37	0
Glen Innes	b	63	39	0
Goulburn	n	63	32	0
Grafton ..	b	87	42	0
Gunnedah	b	66	42	0
Hay	b	71	43	0
Hill End	b	—	—	0
Inverell ..	b	66	15	0
Kiandra ..	n	50	24	0
Lismore ..	b	76	48	0
Maitland ..	b	65	41	0
Marsdens	n	67	41	0
Menindie	b	71	49	0
Molong ..	b	66	34	0
Moree	b	87	46	0
Moruya ..	b	65	36	0
Moss Vale	b	56	39	0
M. Victoria	b	57	40	0
Mudgee ..	n	75	25	0
Murrumbh	b	71	35	0
Murr'r'ndi	b	63	37	0
Mus'lbrook	b	72	31	0
Narrabri ..	b	70	40	0
Newcastle	b	70	45	0
Nowra	-	—	—	—
Orange ..	n	53	30	0
Picton	b	64	34	0
P.M'quarie	b	68	46	0
P.Stephens	b	84	47	0
Qu'nbeyan	b	56	36	0
Quirindi ..	b	77	40	0
Singleton	b	70	44	0
SYDNEY ..	b	67	46	0
Tamworth	-	—	—	—
Taralga ..	b	65	36	0
Taree	b	71	44	0
T'nt'rfield	c	69	37	0
Wagga	b	60	35	0
Walcha ..	b	61	27	0
Walgett ..	b	—	43	0
Wentw'rth	b	73	39	0
Wilcannia	b	—	—	0
Woll'ng ng	b	71	46	0
Young .	n	81	34	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'n gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pe, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy and showery; barometers rising; sea moderate; winds fresh from N. and N.W. Rainfall: Carnarvon, 17th, 0·12; Geraldton, 17th, 0·33; Perth, 17th 0·25, 18th 0·64; Albany, 17th, 0·47; Esperance Bay, 18th, 0·13.

South Australia reports weather generally fine inland, cloudy and dull on and near coast, with moderate sea and rising barometers; winds generally light from N.; calm in interior. Rainfall—Nil.

Victoria.—Generally fine and clear, with northerly winds; fine but cloudy in S.E. at Portland and Cape Otway; moderate sea (high at Cape Otway), and steady barometers on coast. No rain.

Tasmania.—Fine and clear on N. coast, with fresh N.E. winds.

New Zealand.—Russell, bar. 30·30, wind calm, weather dull; Wellington, bar. 29·90, wind S.E., weather dull; Bluff, bar. 29·50, wind S.W., weather showery.

New South Wales.—Fine and clear throughout colony, with light variable westerly winds and calms, and rising barometers; some rain, smooth sea, and light westerly winds on coast. (See map above.)

Queensland.—Fine and clear on E. coast, with S.E. winds and smooth sea; no rain.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, calm, clear, warm, temperature 58°; Clarence River, E., fine, smooth sea, temperature 71°; Deniliquin, calm, fine, temperature 64.; Eden, N.E., 14, fine, smooth sea, temperature 63°; Forbes, calm, fine, temperature 65°; Goulburn, calm, fine, temperature 59°; Menindie, N., fine, temperature 67°. Moruya, E.N.E., 28, fine, smooth sea, temperature 65°; Newcastle N.W., 8, fine, smooth sea, temperature 72°; Port Macquarie, N.N.E., 42, hazy, smooth sea, temperature 70°; Sydney, N.N.E., 8, fine and clear, smooth sea, temperature 67°; Wentworth, N.N.E., 28, fine, clear, temperature 62°.

Victoria.—Melbourne, N., 18, cloudy, squally, temperature 66°; Portland, N., 34, dull, smooth sea, temperature 64°; Cape Otway, N., 23, dull, misty, high sea, temperature 65°; Wilson's Promontory, N.N.W., 34, dull, moderate sea, temperature 70°.

STATE OF RIVERS.

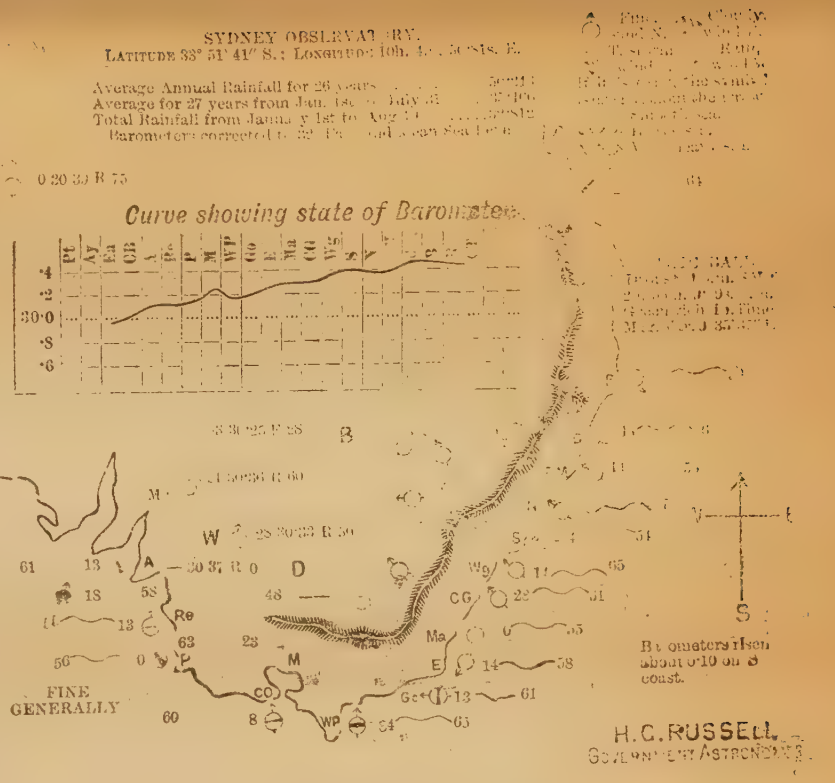
Murrumbidgee: At Wagga, 6 feet 3 inches above summer level; at Hay, 1 foot 9 inches above summer level; at Balranald, 2 feet 9 inches above summer level. Murray: At Albury, 2 feet above summer level; at Euston, 4 feet 7 inches above summer level. Darling: At Wentworth, 4 feet 7 inches above summer level; at Pooncarie, 8 inches above summer level; at Menindie, 1 foot 5 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 19.

Sun rises at 6.36, sets at 5.31; Moon, 12.25 p.m., 1.9 a.m.; Mercury, 7.26 a.m., 7.22 p.m.; Venus, 7.59 a.m., 7.44 p.m.; Mars, 4.7 a.m., 1.54 p.m.; Jupiter, 7.28 a.m., 6.47 p.m.; Saturn, 3.32 a.m., 1.26 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 19: 2.6 a.m., 2.40 p.m.

Stations	wt	Mx	Mn	R'in
Albury ..	b	64	41	0
Armidale	b	67	36	0
Balranald	b	81	42	0
Bathurst ..	b	70	30	0
Bend'meer	b	65	30	0
Bodalla ..	b	77	32	0
Bourke ..	b	82	43	0
Camd'n H.	b	70	53	0
C. St. Geo.	b	66	51	0
Carcoar ..	b	54	29	0
Casino	b	83	37	0
Cassilis .	b	63	42	0
Clarence ..	c	81	54	0
Condob'lin	b	71	32	0
Cooma	n	48	29	0
Coonab'n.	b	74	34	0
Coonamble	b	—	—	0
Cowra	b	62	52	0
Deniliquin	b	75	39	0
Dubbo ..	b	78	38	0
Eden	b	63	47	0
Euston ..	c	84	47	0
Forbes....	b	—	39	0
Glen Innes	b	75	36	0
Goulburn	b	69	32	0
Grafton ..	b	83	46	0
Gunnedah	b	71	44	0
Hay	b	76	45	0
Hill End	b	—	—	0
Inverell ..	b	66	15	0
Kiandra ..	s	52	30	0
Lismore ..	b	77	47	0
Maitland ..	b	53	41	0
Marsdens	b	73	43	0
Menindie	b	55	49	0
Molong ..	b	70	36	0
Moree	b	80	51	0
Moruya ..	b	68	31	0
Moss Vale	b	60	41	0
M. Victoria	b	60	46	0
Mudgee ..	b	79	30	0
Murrumbh	–	—	—	—
Murr'r'ndi	b	65	43	0
Mus'lbrook	c	76	33	0
Narrabri ..	b	76	43	0
Newcastle	b	74	51	0
Nowra	–	—	—	—
Orange ..	n	51	32	0
Picton	b	65	38	0
P.M'quarie	b	69	47	0
P.Stephens	c	80	52	0
Qu'nbeyan	b	59	37	0
Quirindi ..	b	78	40	0
Singleton	b	71	46	0
SYDNEY ..	b	72	49	0
Tamworth	–	—	—	—
Taralga ..	b	68	37	0
Taree	b	74	45	0
T'nt'rfield	b	71	37	0
Wagga....	.	—	—	—
Walcha ..	n	65	28	0
Walgett ..	b	—	48	0
Wentw'rth	b	76	49	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	74	50	0
Young .	b	81	36	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature, and R in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with no means fine weather; a circle with half clouded over, or hot; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown: W., Perth; A., Albany; Ea., Eucla; CB., Cape Borda; A., Adelaide; Re., Robe; P., Portland; M., Melbourne; W.P., Wilson's Promontory; CO., Cape Otway; E., Eden; M., Montague; G., Jervis Bay; Wg., Wollongong; S., Sydney; N., Newcastle; Ma., Marsden; C., Clarence River; B., Brisbane; P., Port Macquarie; CG., Cooktown; M., Mornindi; Mi., Miriland. The state of barometer is given in tenths of inches, Albany, Melbourne, Wentworth, Bourke, and Alice Springs. The barometer curve covers one of a pair of curves to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear on S. coast, with fresh westerly wind and moderate sea. Rainfall: Esperance Bay, 0·04.

South Australia reports weather generally dull inland to Quorn. Winds N.E. to N.W.; force, 13 to 23 miles per hour. Light rains recorded on parts of coast; fine and clear in Northern Territory and central Australia, with light S.E. winds and calms. Rainfall: Eucla, 0·01; Streaky Bay, 0·11 (thunder storms in early morning); Cape Borda, 0·04; Robe, 0·02; and M'Donnell Bay, 0·02.

Victoria.—Generally cloudy and unsettled, but no rain falling; moderate sea, rising barometers, and light to fresh northerly winds on coast; strong N. wind, in gusts, at Melbourne. Rainfall: Portland, 0·05. Dull inland at Echuca, with fresh N. wind.

Tasmania.—Hazy on N. coast, light N.N.W. wind at Low Heads.

New Zealand.—Russell, bar. 30·00, wind calm; Wellington, bar. 30·20, wind N.E., light; Bluff, bar. 30·30, wind N., light; weather generally fine and clear.

New South Wales.—Fine, clear weather throughout colony, with light westerly winds and calm smooth sea; falling barometers and light N.W. and W. winds on coast. Calm inland. No rain.

Queensland.—Generally fine and clear, with light S.E. winds and moderate sea. Dull at Rockhampton. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers falling. Melbourne, N.N.E., 12, cloudy, temperature 71°; Cape Otway, N., 12, gloomy, misty, rough sea, temperature 67°; Portland, N., 12, fine, smooth sea, temperature 62°; Wilson's Promontory, N., 12, sultry, cloudy, smooth sea, temperature 71°.

New South Wales.—Albury, calm, fine, temperature 62°; Cape St. George, calm, fine, smooth sea, temperature 70°; Clarence River, E.N.E., 12, smooth sea, temperature 67°; Deniliquin calm, fine, clear, temperature 59.; Dubbo, S.W., 14, fine, clear, temperature 67°; Eden, N.E., 14, fine, smooth sea temperature 62°; Forbes, calm, fine, clear, temperature 68°; Goulburn, calm, fine, temperature 62°; Moruya, N.E., 14, fine, smooth sea, temperature 64°; Newcastle, N.W., 8, fine, smooth sea temperature 5 °; Port Macquarie, N.E., 28, hazy, smooth sea, temperature 72°; Sydney, E.N.E., 8, fine, cloudless, smooth sea, temperature 65°; Wentworth, N., fine, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 9 inches above summer level; at Hay, 1 foot 6 inches above summer level; at Balranald, 2 feet 8 inches above summer level. Murray: At Albury, 4 feet 7 inches above summer level; at Euston, 4 feet 6 inches above summer level. Darling: At Wentworth, 4 feet 8 inches above summer level; at Pooncarie, 1 foot 1 inch above summer level; at Menindie, 1 foot 5 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 20.

Sun rises at 6.35, sets at 5.32; Moon, 1.10 p.m., 2.1 a.m.; Mercury, 7.23 a.m., 7.19 p.m.; Venus, 7.58 a.m., 7.46 p.m.; Mars, 4.6 a.m., 1.53 p.m.; Jupiter, 7.25 a.m., 6.44 p.m.; Saturn, 3.28 a.m., 1.22 p.m. New moon, 10th; full moon, 26th.

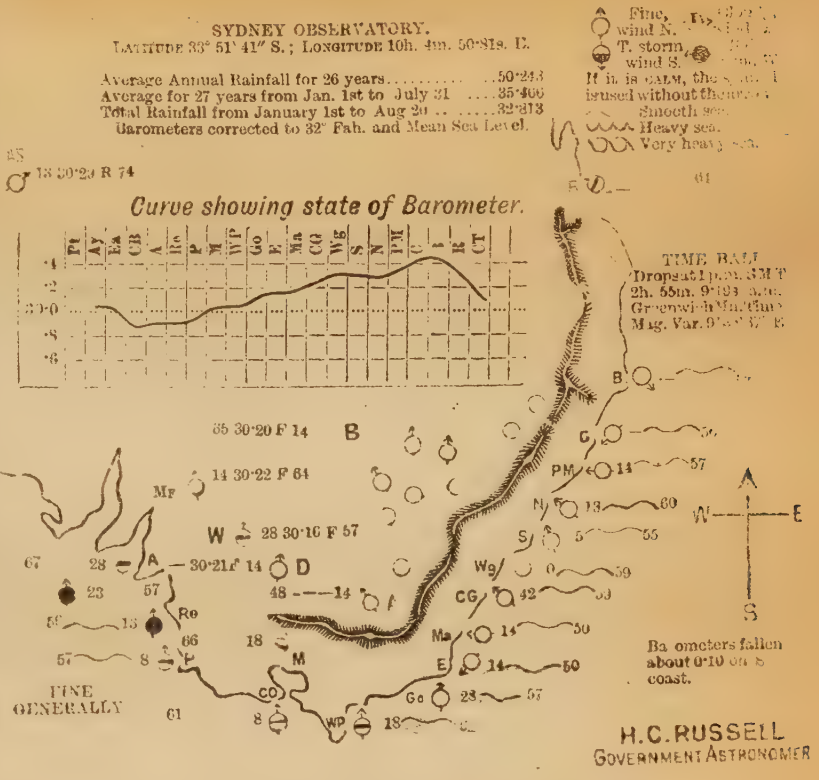
High water at Fort Denison, August 20: 3.13 a.m., 3.18 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 20, 1885.

Stations	wt	Mx	Mn	R	in
Albury ..	b	73	43	0	
Armidale	b	71	40	0	
Balranald	b	87	47	0	
Bathurst..	b	73	33	0	
Bend'meer	b	67	31	0	
Bodalla ..	b	70	30	0	
Bourke ..	b	91	56	0	
Camd'n H.	b	72	57	0	
C. St. Geo.	b	73	47	0	
Carcoar ..	b	57	41	0	
Casino	b	83	39	0	
Cassilis ..	b	68	42	0	
Clarence ..	b	79	53	0	
Condob'lin	b	65	38	0	
Cooma	n	76	28	0	
Coonab'n.	b	78	36	0	
Coonamble	b	—	—	0	
Cowra	b	62	54	0	
Deniliquin	b	80	45	0	
Dubbo ..	b	82	40	0	
Eden	b	69	45	0	
Euston ..	b	88	51	0	
Forbes....	b	—	42	0	
Glen Innes	b	73	35	0	
Goulburn	b	72	30	0	
Grafton ..	b	87	46	0	
Gunnedah	b	73	46	0	
Hay	b	81	44	0	
Hill End	b	—	—	0	
Inverell ..	b	67	15	0	
Kiandra ..	n	57	24	0	
Lismore ..	b	76	47	0	
Maitland ..	b	56	48	0	
Marsdens	b	76	46	0	
Menindie	c	82	49	0	
Molong ..	b	71	36	0	
Moree	b	81	49	0	
Moruya ..	b	70	39	0	
Moss Vale	b	64	38	0	
M. Victoria	b	63	46	0	
Mudgee ..	n	81	31	0	
Murrumbh	b	77	39	0	
Murr'r'ndi	b	68	45	0	
Mus'lbrook	b	79	41	0	
Narrabri ..	b	79	44	0	
Newcastle	b	72	55	0	
Nowra	-	—	—	--	
Orange ..	b	59	35	0	
Picton	b	71	39	0	
P.M'quarie	b	69	48	0	
P.Stephens	b	83	53	0	
Qu'nbeyan	b	61	3	0	
Quirindi ..	b	81	40	0	
Singleton	b	72	48	0	
SYDNEY ..	b	74	51	0	
Tamworth	-	—	—	—	
Taralga ..	b	73	42	0	
Taree	b	73	45	0	
T'nt'rfield	b	74	35	0	
Wagga....	-	—	—	—	
Walcha ..	b	62	31	0	
Walgett ..	b	—	51	0	
Wentw'rth	c	85	52	0	
Wilcannia	b	—	—	0	
Woll'ng'ng	b	79	46	0	
Young .	b	99	39	0	

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 20 .. ..32·813
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, raining; s, snow; t, thunder; th, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla, CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Showery on S. coast, with fresh W. wind and moderate sea. Rainfall—Esperance Bay, 0·11; Albany, 0·86.

South Australia reports weather generally dull inland to Beltana, raining in parts; winds N.E. to N.W., and from 13 to 34 miles in velocity; sky half clouded W. of Cape Borda. Light rains recorded on and near coast, with thunderstorms, in night heaviest; 0·35 at Warooka and 0·33 at Port Lincoln. Smooth sea, steady barometers, and fresh N. winds on coast. Rainfall—Streaky Bay, 0·12; Robe, 0·05; Cape Borda, 0·35; MacDonnell Bay, 0·01.

Victoria.—Generally cloudy upon coast, with light northerly winds, falling barometers, and smooth sea; fine and clear inland at Echuca and Omeo. Rainfall—0·01 at Portland.

Tasmania.—Cloudy on N. coast, with light S. wind. Rainfall—Low Heads, 0·14.

New Zealand.—Russell, barometer 30·30, wind S., dull and showery; Wellington, barometer 30·00, wind calm, dull and showery; Bluff, barometer 30·30, wind S.W., fine and clear.

New South Wales.—Generally fine and clear weather throughout, with light westerly and N.W. winds, and calm smooth sea; falling barometers and light N.W. winds on coast. No rain.

Queensland.—Generally cloudy on E. coast, N. of Rockhampton; fine and clear at Southern ports; rather rough sea at Townsville; rainfall, 0·08 at Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegrams; Cape Otway, N., 6, misty, smooth sea, temperature 61°; Portland, N., 36, showery, smooth sea, temperature 60°; Wilson's Promontory, N., 18, threatening rain, moderate sea, temperature 65°.

New South Wales.—Albury, W., fine, temperature 62°; Cape St. George, W., 42, cloudy, smooth sea, temperature 70°; Clarence River, N.E., 46, fine, smooth sea, temperature 70°; Deniliquin, N., fine, temperature 66°; Dubbo, N.W., fine, dust storms, temperature 58°; Eden, N.E., 14, fine, smooth sea, temperature 59°; Goulburn, W., fine, temperature 62°; Menindie, N., cloudy, temperature 72°; Moruya, N.E., 14, hazy, fine, smooth sea, temperature 66°; Newcastle, N.E., 8, fine, smooth sea, temperature 69°; Port Macquarie, N.N.E., hazy, smooth sea, temperature 70°; Sydney, N.E., 8, fine, hazy, smooth sea, temperature 70°; Wentworth, N., cloudy, temperature 67°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet above summer level; at Hay, 1 foot 8 inches above summer level; at Balranald, 2 feet 6 inches above summer level. Murray: At Albury, 4 feet 6 inches above summer level; at Euston, 4 feet 6 inches above summer level. Darling: At Wentworth, 3 feet 9 inches above summer level; at Pooncarie, 1 foot 6 inches above summer level; at Menindie, 1 foot 4 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 21.

Sun rises at 6.34, sets at 5.33; Moon, 1.59 p.m., 2.50 a.m.; Mercury, 7.19 a.m., 7.17 p.m.; Venus, 7.57 a.m., 7.47 p.m.; Mars, 4.4 a.m., 1.52 p.m.; Jupiter, 7.21 a.m., 6.41 p.m.; Saturn, 3.25 a.m., 1.19 p.m. New moon, 10th; full moon, 26th.

High water at Port Denison, August 21: 4.23 a.m., 4.57 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 21, 1885.

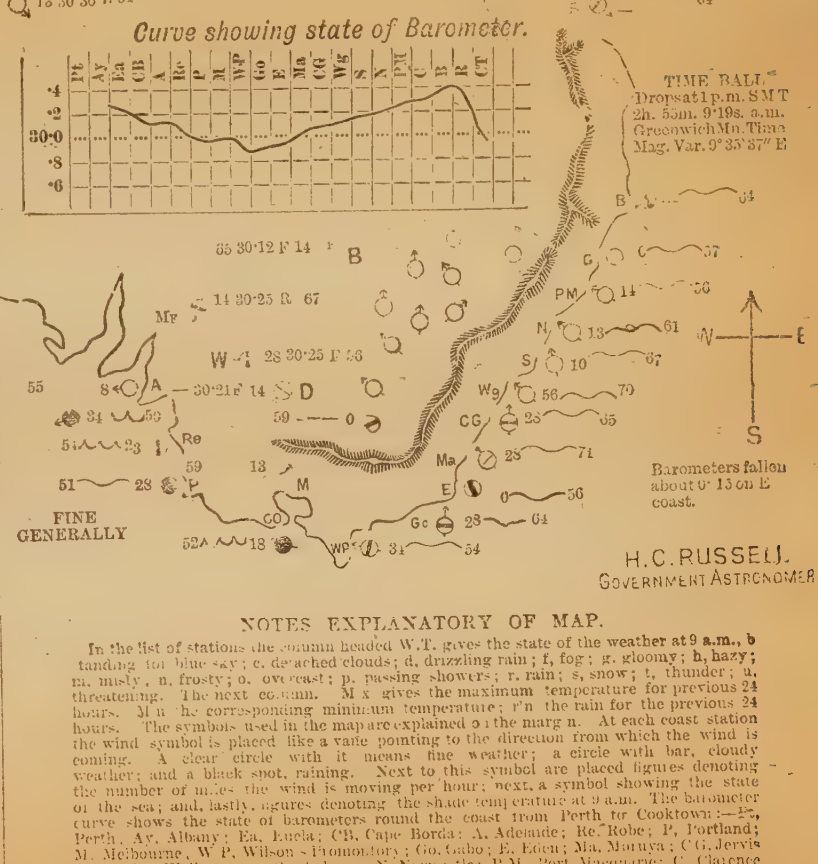
...ous	W.T.	Mx	Mn	R'fn
...y ..	u	77	42	0
...dale	b	69	40	0
...nald	c	89	48	0
...urst ..	b	74	37	0
...meer	b	69	31	0
...lla ...	c	80	40	0
...ke ...	b	92	55	0
...'n H.	b	72	56	0
... Geo.	c	73	54	0
...ar ..	b	57	44	0
...	b	82	36	0
...fis...	b	62	42	0
...nee...	b	79	53	0
...b'lin	c	66	49	0
...a....	c	74	38	0
...ab'n.	b	76	34	0
...amble	b	—	—	0
...a....	b	64	55	0
...tiquin	r	84	48	0
...o ..	b	81	39	0
... .	c	61	49	0
...on ..	c	86	52	0
...es....	b	—	45	0
... Innes	b	75	29	0
...burn	b	73	38	0
...ton ..	b	86	47	0
...8 56				
...ucdah	b	73	46	0
... .	c	8[illegible]	54	0
... End	b	—	—	0
...ell ..	b	62	38	0
...dra ..	r	58	36	0
...ore ..	c	79	46	0
...and ..	b	53	45	0
...dens	b	80	51	0
...die	g	87	60	0
...ng ..	b	75	41	0
...e	b	81	51	0
...ya ..	c	72	48	0
... Vale	b	65	46	0
...ictoria	b	65	49	0
...dgee ..	b	81	31	0
...umbh	c	79	39	0
...r'ndi	b	70	46	0
...brook	b	81	40	0
...bri ..	b	86	42	0
...astle	b	75	53	0
...a....	b	82	53	0
...ge ..	b	61	35	0
...n....	b	72	41	0
...quarie	b	69	50	0
...phens	b	82	50	0
...beyan	b	63	45	0
...ndi ..	b	83	40	0
...leton	b	75	46	0
...BY ..	b	72	66	0
...worth	-	—	—	—
...lga ..	b	72	42	0
... .	b	77	46	0
...rfield	b	72	33	0
...ga....	u	75	41	0
...ha ..	b	63	31	0
...rett ..	b	—	53	0
...tw'rth	c	84	52	0
...annia	-	—	—	—
...'ng ng	b	79	56	0
...ng ..	c	83	45	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 13h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 21 .. ..32·813
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL,
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty, n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for the previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Men'ndie, Mt. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

...rn Australia.—Dull on S. coast, with light northerly and ... winds and moderate sea; showery at Esperance Bay. ...: Albany, 0·2: Esperance Bay, 0·91.

... Australia reports weather generally fine, with scattered ... Dull between Hawker and Peak. Light variable winds ... and S.W. to W. on coast. Light rains recorded inland ...k, but very scattered; heaviest at M'Donnell Bay, 0·33. ...ill: Mount Gambier, 0·33; Peak, 0·13; Cape Borda, 0·06; ...e, 0·01; and Robe, 0·09.

...—Cloudy round coast, with light westerly winds, rising ...rs, and rough sea, northerly and W.N.W. winds and ... weather inland. Rainfall: Portland, 0·31; Cape Otway, Wilson's Promontory, 0·11; Lake Entrance, 0·01; Echuca, Omeo, 0·08.

...nia.—Squally from W.N.W. on N. coast. Rainfall: Low ...22.

...Zealand.—Russell, barometer 30·40, wind S.E., generally ... Wellington, barometer 30·30, wind N.W., generally fine; ...rometer 30·20, wind calm, generally fine; Gisborne, wind ...ng, sea rough.

...South Wales.—Fine and clear weather throughout, with ...sterly winds, and calm smooth sea; falling barometers on ... Cloudy on Victorian border, but no rain.

...nsland.—Cloudy on E. coast, with S.W. and S.E. winds, ...derate sea. Rainfall: Townsville, 0·30; Cooktown, 0·06.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., cloudy, temperature 62°; Cape St. George, N., 42, fine, smooth sea, temperature 73°; Clarence River, N.E., fine, smooth sea, temperature 68°; Deniliquin, S.W., fine, temperature 70°; Eden, 14, fine, smooth sea, temperature 62°; Goulburn, W., fine, temperature 64°; Menindie, calm, 0, cloudy, temperature 66°; Moruya, N.W., 42, cloudy, moderate sea, temperature 71°; Newcastle, N.W., 28, fine, smooth sea, temperature 76°; Port Macquarie, N.N.E., 42, fine, smooth sea, temperature 71°; Sydney, N.N.W., 14, fine, smooth sea, temperature 77°; Wentworth, N.W., fine, temperature 60°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 3 inches above summer level; at Hay, 2 feet 2 inches above summer level; at Balranald, 2 feet 6 inches above summer level. Murray: At Albury, 4 feet 4 inches above summer level; at Euston, 4 feet 6 inches above summer level. Darling: At Wentworth, 4 feet 9 inches above summer level; at Pooncarie, 1 foot 8 inches above summer level; at Menindie, 1 foot 3 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 22.

Sun rises at 6.33, sets at 5.33; Moon, 2.49 p.m., 3.37 a.m.; Mercury, 7.14 a.m., 7.12 p.m.; Venus, 7.56 a.m., 7.49 p.m.; Mars, 4.3 a.m., 1.51 p.m.; Jupiter, 7.18 a.m., 6.38 p.m.; Saturn, 3.21 a.m., 1.15 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 22: 5.31 a.m., 6.0 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 22, 1885.

Stations	wt	Mx	mn	r'in
Albury ..	b	63	44	0
Armidale	u	69	40	0
Balranald	b	71	39	0
Bathurst..	u	73	44	0
Bend'meer	u	69	35	0
Bodalla ..	g	77	48	0·06
Bourke ..	u	82	53	0·20
Camd'n H.	–	—	—	—
C. St. Geo.	g	74	56	0
Carcoar ..	u	62	44	0
Casino	b	81	51	0
Cassilis .	g	62	46	0
Clarence ..	b	81	53	0
Condob'lin	u	56	41	0·37
Cooma ...	g	70	42	0
Coonab'n.	c	75	43	0
Coonamble	b	—	—	0
Cowra	r	71	61	0·11
Deniliquin	c	71	37	0
Dubbo ..	o	79	54	0
Eden	u	75	51	0
Euston ..	c	68	35	0
Forbes ..	r	—	48	0·12
Glen Innes	u	72	41	0
Goulburn	g	73	45	0
Grafton ..	b	84	46	0
Gunnedah	c	74	49	0
Hay	b	85	37	0
Hill End	u	—	—	0
Inverell .	o	66	38	0
Kiandra ..	s	45	33	0
Lismore ..	c	74	57	0
Maitland..	b	79	51	0
Marsdens	u	73	55	0·62
Menindie	b	65	45	0
Molong ..	u	72	53	0
Moree	o	80	54	0
Moruya ..	r	80	51	0·03
Moss Vale	u	67	50	0
M. Victoria	c	66	48	0
Mudgee ..	u	78	41	0
Murrumbh	r	70	49	0·69
Murr'r'ndi	b	68	55	0
Mus'lbrook	g	78	48	0
Narrabri ..	u	92	51	0
Newcastle	b	78	58	
Nowra	–	—	—	
Orange ..	g	62	45	
Picton	c	74	48	
P.M'quarie	b	70	50	
P.Stephens	c	83	51	
Qu'nbeyan	r	64	45	
Quirindi ..	b	79	49	
Singleton	b	75	51	
SYDNEY ..	g	78	59	
Tamworth	–	—	—	
Taralga ..	u	71	48	
Taree	b	78	45	
T'nt'rfield	b	73	43	
Wagga....	g	62	48	
Walcha ..	g	63	32	
Walgett ..	b	—	55	
Wentw'rth	g	67	39	
Wilcannia	–	—	—	
Woll'ng'ng	g	83	60	
Young ..	r	74	48	

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LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

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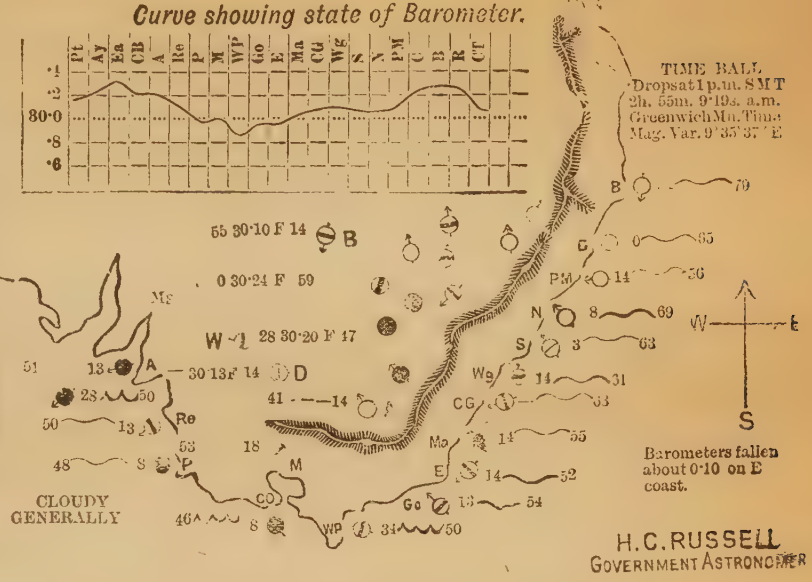


H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla, CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland, M, Melbourne, W P, Wilson's Promontory; Co, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Mendindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Perth, cloudy, with N.E. wind, rain on 19th, 0.84; Esperance Bay, fine and clear.

South Australia reports weather fine, with scattered clouds inland, cloudy on and near coast, with light rain recorded, heaviest (0.66) at Beachport, and 0.53 at Kingston, winds S.W., force 23 to 28 miles. Rainfall: M'Donnell Bay and Robe, 0·24; Adelaide, 0·11; Cape Borda, 0·12; Streaky Bay, 0·13; Eucla, 0·02; and Peak, 0·05.

Victoria.—Generally cloudy, showery in S.E., rather rough sea, steady barometers and fresh N.W. winds on coast. Rainfall: Portland, 0.60; Cape Otway, 0·14; Lake Entrance, 0·04; Omeo, 0·08. Foggy at Cape Otway; fine but cloudy at Omeo.

Tasmania.—Fine and clear on N. coast, with fresh W. wind.

New Zealand.—Russell, barometer 30·40, wind N.W., generally fine; Wellington, barometer 30·20, wind N.W., generally fine; Bluff, barometer 29·80, wind N.W., generally fine.

New South Wales.—Generally cloudy and unsettled, with light S.W. to N.W. winds and calms, smooth sea on coast, barometers falling, light rains recorded in some places, still falling on the western slopes of mountains, heaviest at Murrumburrah, 0·69. Details in map above. Kiandra reports rain, snow, and foggy. Gundaroo, rainfall 0·21, and still falling. Temora, rainfall 0·46, and still falling.

Queensland.—Cloudy on E. coast, with S.E. to S.W. winds, and moderate sea. Rainfall: C. Moreton, 0·29; Cooktown, 0·50.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegrams; Cape Otway, W., 12, misty, rough sea, temperature 52°; Portland, W.S.W., 36, cloudy, smooth sea, temperature 52°; Wilson's Promontory, W., 36, showery, rough sea, temperature 46°.

New South Wales.—Albury, W.S.W., cloudy, like rain, temperature 60°; Clarence River, N.E., 30, fine, rough sea, temperature 68°; Deniliquin, W., 28, cloudy, temperature 60°; Dubbo, N.W., stormy, temperature 61°; Eden, N., 14, fine, smooth sea, temperature 58°; Forbes, calm, cloudy, temperature 62°; Goulburn, calm, cloudy, temperature 58°; Menindie, W., 28, fine, temperature 64°; Moruya, N.N.E., 14, fine, smooth sea, temperature 66°; Newcastle, W., 10, cloudy, smooth sea, temperature 75°; Port Macquarie, N.N.E., 40, hazy, smooth sea, temperature 71°; Sydney, calm, cloudy, smooth sea; Wentworth, W.N.W., 28, fine, temperature 74°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 3 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 2 feet above summer level. Murray: At Albury, 4 feet 3 inches above summer level; at Euston, 5 feet 7 inches above summer level. Darling: At Wentworth, 4 feet 9 inches above summer level; at Pooncarie, 1 foot 8 inches above summer level; at Menindie, 1 foot 2 inches above summer level; at Wilcannia, low; at Bourke, low.

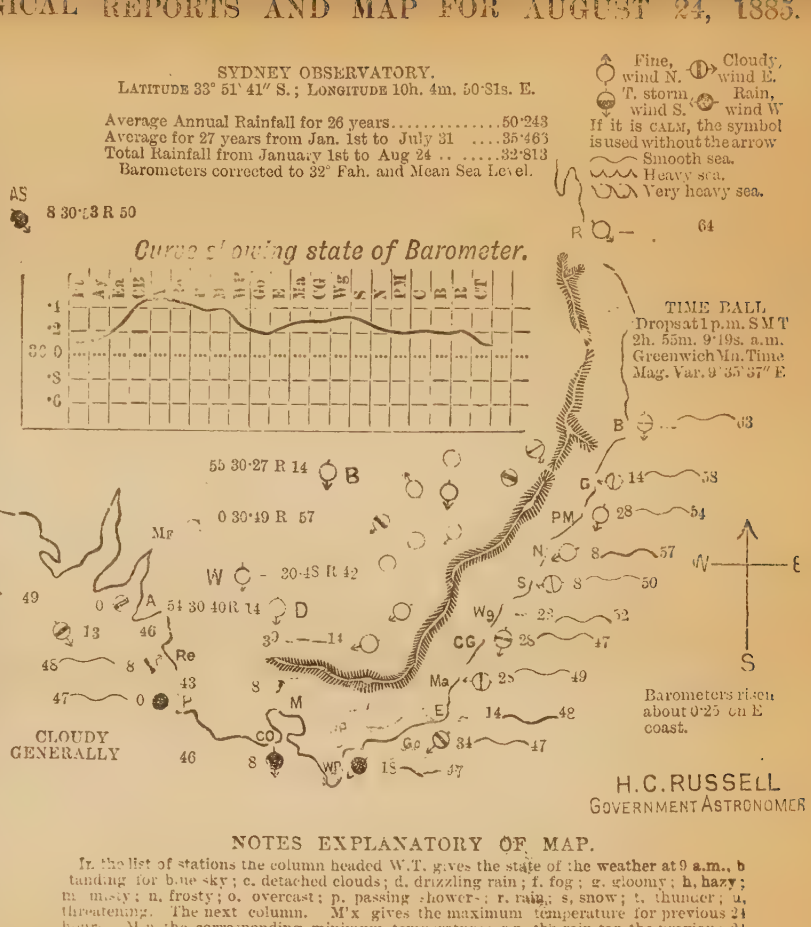
ASTRONOMICAL MEMORANDA FOR AUGUST 24.

Sun rises at 6.30, sets at 5.35; Moon, 4.34 p.m., 5.1 a.m.; Mercury, 7.4 a.m., 7.2 p.m.; Venus, 7.54 a.m., 7.53 p.m.; Mars, 4 a.m., 1.49 p.m.; Jupiter, 7.11 a.m., 6.32 p.m.; Saturn, 3.14 a.m., 1.8 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 24: 7.14 a.m., 7.35 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 24, 1885.

Stations	wt	Mx	mn	R'in
Albury ..	b	61	36	0
Armidale	n	62	33	0·14
Balranald	b	69	32	0
Bathurst..	g	54	28	0·16
Bend'meer	u	65	26	0
Bodalla ..	c	70	31	0
Bourke ..	b	70	33	0
Camd'n H.	b	73	45	0
C. St. Geo.	c	62	43	0·05
Carcoar ..	b	54	39	0·49
Casino	c	84	46	0
Cassilis .	n	67	34	0·15
Clarence ..	c	83	55	0
Condob'lin	u	48	31	0·04
Cooma ...	n	60	30	0
Coonab'n.	n	63	22	0·06
Coonamble	b	—	—	0
Cowra	b	63	55	0·15
Deniliquin	b	65	32	0
Dubbo ..	b	63	26	0·13
Eden	c	59	41	0
Euston ..	c	65	29	0
Forbes....	c	—	39	0·17
Glen Innes	c	72	33	0·21
Goulburn	b	53	25	0
Grafton ..	g	85	49	0
Gunnedah	b	64	37	0·24
Hay	u	68	44	0
Hill End	n	—	—	0·23
Inverell ..	b	64	14	0
Kiandra ..	b	43	24	0
Lismore ..	u	81	54	0
Maitland..	b	51	49	0·09
Marsdens	b	64	44	0
Menindie	b	63	50	0
Molong ..	n	54	34	0·22
Moree	b	78	37	0·10
Moruya ..	c	65	41	0·01
Moss Vale	c	50	26	0
M. Victoria	u	60	30	0
Mudgee ..	n	71	21	0·04
Murrumbh	c	62	35	0
Murr'r'ndi	b	69	35	0·38
Mus'lbrook	b	67	29	0·18
Narrabri ..	b	67	35	0·05
Newcastle	b	68	48	0
Nowra	-	—	—	—
Orange ..	n	48	30	0
Picton	c	60	38	0
P.M'quarie	b	66	42	0
P.Stephens	b	79	47	0·02
Qu'nbeyan	b	55	34	0
Quirindi ..	n	71	38	0·35
Singleton	b	74	46	0
SYDNEY ..	u	63	46	0
Tamworth	-	—	—	—
Taralga ..	n	55	25	0·12
Taree	b	70	44	0·19
T'nt'rfield	c	71	35	0·15
Wagga....	c	63	30	0
Walcha ..	n	61	26	0·47
Walgett ..	b	—	38	0
Wentw'rth	b	63	39	0
Wilcannia	c	—	—	0
Woll'ng ng	g	67	41	0
Young ..	b	67	34	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c. detached clouds; d. drizzling rain; f. fog; g. gloomy; h, hazy; m. misty; n. frosty; o. overcast; p. passing showers; r. rain; s, snow; t. thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. Min the corresponding minimum temperature; r n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay. Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M. Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G. Jervis Bay, Wg. Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C. Clarence River; B, Brisbane; R. Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometers is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light N. and E. winds. Rainfall—Geraldton, 0·96.

South Australia reports weather generally fine, with scattered clouds; dull on parts of coast; wind light from S.E. and calm; light rains recorded on and near coast, heaviest at Victor Harbour, 0·44. Rainfall—Port Lincoln, 0·07: Cape Borda, 0·06; Adelaide, 0·10; Robe, 0·20; M'Donnell Bay, 0·11; light rain falling inland at Alice Springs.

Victoria.—Cloudy and showery on coast, with light S. to W. winds and rising barometers, moderate sea. Rainfall—Melbourne, 0·09; Portland, 0·14; Cape Otway, 0·11; Wilson's Promontory, 0·36; Lake Entrance, 0·01; and Omeo, 0·02.

Tasmania.—Fine and clear on N. coast, with light S.S.E. wind; hoar frost at Low Heads.

New Zealand.—Russell, barometer 29·90, wind N.W., fine; Wellington, barometer 29·70, wind N.W., strong in squalls; Bluff, Sunday night, barometer 29·60, wind S.W.

New South Wales.—Weather generally very unsettled, cloudy on coast and mountains. Winds fresh and cold from south; sea smooth; barometers rising. Calm inland; cloudy in places; see map above. Temora reports dull weather; rain, 0.05.

Queensland.—Generally cloudy on E. coast, with southerly winds and moderate sea. Fine and clear at Rockhampton and Townsville. Rainfall: Brisbane, 0·02; C. Moreton, 0·07.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 13, fine, temperature 51°; Cape Otway, S.W., 8, misty, moderate sea, temperature 50°; Portland, S.W., 18, raining, smooth sea, temperature 52°; Wilson's Promontory, W.S.W., 18, cloudy and squally, moderate; temperature 51°

New South Wales.—Albury, W., fine, temperature 54°; Cape St. George, S., 28, raining, smooth sea, temperature 48°; Clarence River, S.S.W., fine, smooth sea, temperature 67°; Deniliquin, S., 14, fine, temperature 62°; Dubbo, N.W., 14, fine, temperature 52°; Eden, S.W., 14, fine, smooth sea, temperature 55°; Forbes, W., cloudy, temperature 60°; Goulburn, calm, dull, temperature 51°; Menindie, S.W., 14, fine, temperature 59°; Moruya, W., 28, cloudy, smooth sea, temperature 49°; Newcastle, S., 28, fine, smooth sea, temperature 56°; Port Macquarie, S., 42, fine, smooth sea, temperature 65°; Sydney, S.S.W., 14, dull and cloudy, smooth sea, temperature 55°; Wentworth, calm, fine, temperature 52°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 1 inch above summer level; at Hay, 3 feet 6 inches above summer level; at Balranald, 2 feet above summer level. Murray: At Albury, 4 feet above summer level; at Euston, 5 feet 9 inches above summer level. Darling: At Wentworth, 4 feet 9 inches above summer level; at Pooncarie, 2 feet above summer level; at Menindie, 1 foot above summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 25.

Sun rises at 6.29, sets at 5.35; Moon, 5.29 p.m., 5·40 a.m.; Mercury, 6.58 a.m., 6.56 p.m.; Venus, 7.53 a.m., 7.55 p.m.; Mars, 3.58 a.m., 1.48 p.m.; Jupiter, 7.7 a.m., 6.29 p.m.; Saturn, 3.11 a.m., 1.5 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 25: 7.55 a.m., 8.14 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 25, 1885.

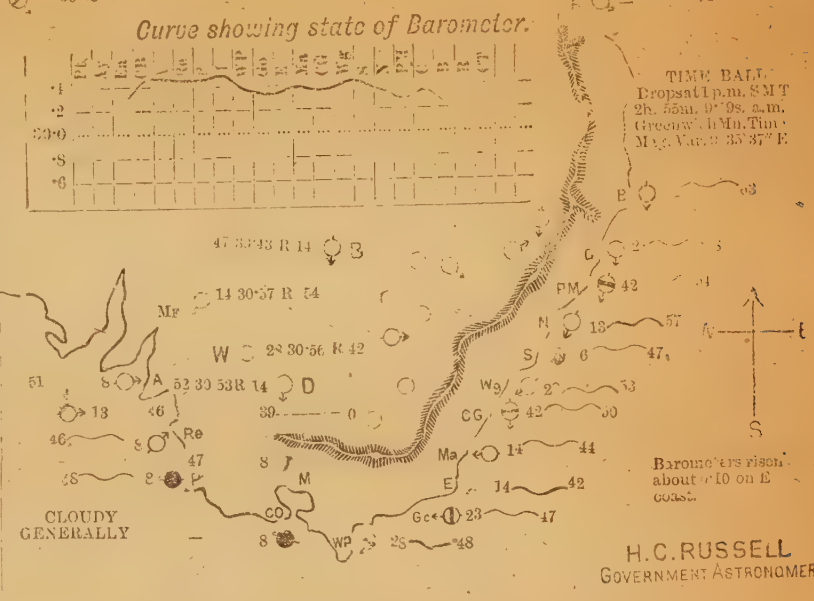
Stations	wt	Mx	Mn	Rain
Albury ..	n	61	32	0
Armidale	b	60	28	0
Barraba'd	b	71	37	0
Bathurst..	b	55	28	0
Bend'meer	n	59	27	0
Bodulla ..	b	64	27	0
Bourke ..	b	66	36	0
Caund'n H.	u	63	51	0
C. St. Geo.	c	54	43	0·07
Carcoar ..	n	49	35	0
Casino	b	74	50	0
Cassilis .	b	53	42	0
Clarence ..	c	8?	53	0
Condob'lin	b	45	28	0
Coona ..	b	3?	19	0
Coonab'n.	b	63	22	0
Coonamble	b	—	—	0
Cowra	b	60	52	0
Deniliquin	b	63	30	0
Dubbo ..	—	—	—	—
Eden	b	59	39	0
Euston ..	b	68	56	0
Forbes ..	b	—	30	0
Glen Innes	b	73	32	0
Goulburn	f	51	24	0
Grafton ..	b	73	47	0
Gunnedah	b	63	43	0
Hay	b	59	30	0
Hill End	b	—	—	0
Inverell ..	b	64	40	0
Kiandra ..	n	40	13	0
Lismore ..	u	73	55	0·02
Maitland ..	b	59	46	0
Marsdens	n	56	38	0
Menindie	b	61	41	0
Molong ..	n	60	32	0
Moree	b	74	34	0
Moruya ..	b	58	34	0
Moss Vale	—	—	—	—
M. Victoria	n	49	30	0
Mudgee ..	b	71	27	0
Murrumbh	b	56	44	0
Murr'r'ndi	c	57	41	0
Mus'lbrook	b	67	30	0
Narrabri ..	b	67	35	0
Newcastle	b	68	48	0
Nowra	b	55	36	0
Orange ..	n	46	28	0
Picton	b	57	34	0
P.M'quarie	u	63	47	0·02
P.Stephens	b	79	49	1·15
Qu'nbeyan	n	53	32	0
Quirindi ..	b	71	38	0
Singleton	b	60	44	0
SYDNEY ..	d	58	43	0·01
Tamworth	—	—	—	—
Taralga ..	n	55	25	0
Taree	b	68	47	0
T'nt'rfield	c	70	38	0
Wagga....	n	62	27	0
Walcha ..	c	55	30	0
Walgett ..	b	—	36	0
Wentw'rth	b	60	35	0
Wilcannia	b	—	—	0
Woll'ng ng	b	62	45	0
Young ..	n	66	28	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 25 .. ..32·824
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E. T. storm wind S. Rain, wind W. If it is calm, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b signifying fair or blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature, Rn the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A dear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the sea temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay, Albany; Ea, Eucla, CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear at Esperance Bay, with light N.E. wind and smooth sea.

South Australia.—Generally fine and clear, dull between Alice Springs and Powell's Creek; winds generally light from S.E. to N.E., smooth sea, rising barometers, and light easterly winds on coast. Rainfall: Alice Springs, 0·12; and Cape Borda, 0·04.

Victoria.—Generally cloudy, and showery round coast, with smooth sea, rising barometers, and light westerly winds. Fine and clear inland at Echuca. Rainfall: Melbourne, 0·02; Portland, 0·12; Cape Otway, 0·21; Wilson's Promontory, 0·04; Omeo, calm and fine.

Tasmania.—Fine and clear on north coast, with fresh S.E. wind.

New Zealand.—Russell, barometer 30·00, wind calm; Wellington, barometer 29·70, wind N.W.; Bluff, barometer 29·60, wind S.W. Generally fine and clear.

New South Wales.—Generally cloudy on coast and mountains; fine inland, and calm, smooth sea, rising barometers, and fresh S.W. winds on coast; frosty on high lands. Heaviest rain, 1·15, at Port Stephens. Details in map above.

Queensland.—Fine and clear, with southerly winds, and moderate sea on E. coast. Rainfall: 0·75 at Cape Moreton.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, temperature 54°; Cape St. George, S.E., 42, fine, smooth sea, temperature 54°; Deniliquin, S., fine, temperature 61°; Dubbo, N.E., 14, fine; Eden, S., 14, fine, smooth sea, temperature 55°; Forbes, calm, fine, temperature 60°; Goulburn, calm, fine, temperature 53°; Menindie, calm, fine, temperature 56°; Moruya, E., 22, fine, smooth sea, temperature 56°; Newcastle, S., 14, raining, smooth sea, temperature 57°; Port Macquarie, S., 28, unsettled, smooth sea, temperature 63°; Sydney, S., 16, dull and cloudy, smooth sea, temperature 56°; Wentworth, S.W., fine, temperature 51°.

Victoria.—No telegrams.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 2 inches above summer level; at Hay, 4 feet 2 inches above summer level; at Balranald, 1 foot 10 inches above summer level. Murray: At Albury, 3 feet 11 inches above summer level; at Euston, 5 feet 10 inches above summer level. Darling: At Wentworth, 4 feet 8 inches above summer level; at Pooncarie, 2 feet above summer level; at Menindie, 11 inches above summer level; at Wilcannia and Bourke, low.

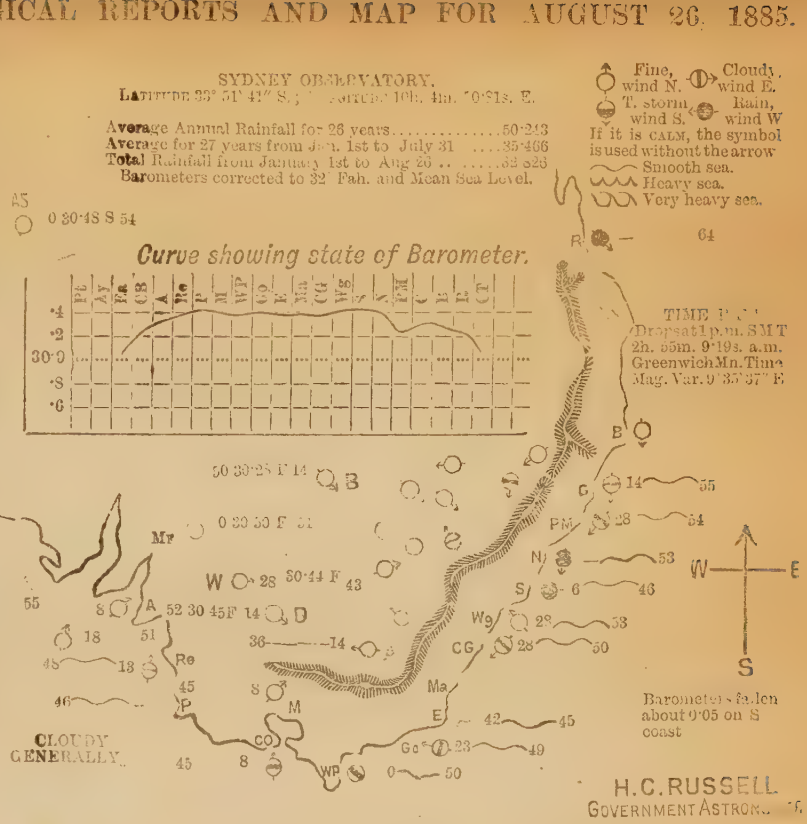
ASTRONOMICAL MEMORANDA FOR AUGUST 26.

Sun rises at 6.28, sets at 5.36; Moon, 6.23 p.m., 6·15 a.m.; Mercury, 6.53 a.m., 6.51 p.m.; Venus, 7.52 a.m., 7.57 p.m.; Mars, 3.57 a.m., 1.47 p.m.; Jupiter, 7.4 a.m., 6.26 p.m.; Saturn, 3.7 a.m., 1.1 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 26: 8.32 a.m., 8.50 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 26, 1885.

Stations		Mx	Mn	R'in
Albury ..	n	63	33	0
Armidale	f	54	36	0
Balranald	b	71	23	0
Bathurst ..	g	56	27	0
Bend'meer	n	62	29	0
Bodalia ..	–	—	—	—
Bourke ..	b	65	39	0
Camd'n H.	c	61	51	0
C. St. Geo.	c	55	44	0·04
Carcoar ..	u	50	26	0
Casino	b	72	45	0
Cassilis .	g	55	53	0
Clarence ..	r	68	52	0·46
Condob'lin	b	45	27	0
Cooma	n	56	27	0
Coonab'n.	b	64	23	0
Coonamble	b	—	—	0
Cowra	n	56	52	0
Deniliquin	n	66	27	0
Dubbo ..	b	63	30	0
Eden	b	59	46	0
Euston ..	b	71	25	0
Forbes....	b	63	32	0
Glen Innes	b	71	31	0
Goulburn	f	59	30	0
Grafton ..	g	75	52	0
Gunnedah	c	63	43	0
Hay	b	61	34	0
Hill End	b	—	—	0
Inverell ..	b	58	51	0
Kiandra ..	n	—	15	0
Lismore ..	u	70	53	0
Maitland ..	p	59	53	0·06
Marsdens	n	61	40	0
Menindie	b	[illegible]	39	0
Molong ..	b	65	33	0
Morce	b	77	44	0
Moruya ..	–	–	—	—
Moss Vale	n	47	28	0
M. Victoria	c	50	32	0
Mudgee .	b	74	36	0
Murrumbh	b	65	33	0
Murr'r'ndi	f	56	38	0
Newcastle	b	61	38	0
Nowra	b	61	38	0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]on	c	57	2[illegible]	0
[illegible]quarie	u	6[illegible]	43	0
[illegible]phens	c	73	50	0·[illegible]
Qu'nbeyan	n	49	32	0
Quirindi ..	b	71	39	0
Singleton	u	61	47	0
SYDNEY ..	d	57	44	0
Tamworth	–	—	—	—
Taralga ..	u	61	30	0
Taree	g	65	44	0·16
T'nt'rfield	c	69	34	0
Wagga....	n	60	28	0
Walcha ..	c	50	31	0
Walgett ..	b	—	33	0
Wentw'rth	n	65	32	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	62	44	0
Young ...	n	80	40	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for bright sky; c, detached clouds; d, drizzling rain; f, fog; [illegible] hazy; [illegible] passing [illegible]; s, snow; t, thunder; [illegible], three [illegible] rain [illegible] for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear at Esperance Bay, with light W. wind and smooth sea. Barometer—At Albany, 29·92; at Perth, 30·06.

South Australia.—Reports weather generally fine and clear, with light N.E. to N. winds; smooth sea, falling barometers on coast; scattered clouds north of Powell's Creek. Rainfall: Tarcoola, Creek, 0·43.

Victoria.—Scattered clouds on coast, with smooth sea, light northerly winds, and falling barometers. Fine and clear inland Echuca and Omeo. Rainfall: Portland 0·03; Cape Otway, [illegible]

Tasmania.—Fine and clear, with light S.E. wind on north east.

New Zealand.—Russell, barometer 30·09, wind N.W.; Wellington, barometer 29·90, wind N.W.; Bluff, barometer 29·80, wind [illegible]. Generally fine and clear.

New South Wales.—Weather unsettled in [illegible] parts, with cold westerly winds, [illegible]; light rain in places on coast (d[illegible] [illegible] and [illegible]land.

Queensland.—Fine and clear in southern parts; showery at Rockhampton and Townsville; wind S.E. and S. Rain: Rockhampton, 0·04.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, E., 8, fine, smooth sea, temperature 54°; Melbourne, S., 13, fine, temperature 54°; Portland, S.W., 13, fine, smooth sea, temperature 54°; Wilson's Promontory, S.W., 13, loudy, smooth sea, temperature 51°.

New South Wales.—Albury, W., fine, temperature 54°; Cape St. George, S., 42, fine, slight sea, temperature 56°; Clarence River, S., raining, moderate sea, temperature 57°; Deniliquin, calm, fine, temperature 58°; Dubbo, calm, fine, temperature 55°; Eden, E.S.E., 14, fine, smooth sea, temperature 53°; Forbes, calm, fine, temperature 63°; Goulburn, calm, fine, temperature 56°; Menindie, S.W., 14, fine, temperature 55°; Newcastle, S., cloudy, moderate sea, temperature [illegible]; Port Macquarie, S., 28, [illegible], temperature 62°; Sydney, S., 13, dull, smooth sea, temperature [illegible]; Wentworth, calm, fine, temperature 53°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 2 inches above summer level; at Hay, 5 feet 4 inches above summer level; at Balranald, 2 feet above summer level. Murray: At Albury, 4 feet above summer level; at Euston, 6 feet 1 inch above summer level. Darling: At Wentworth, 4 feet 8 inches above summer level; at Pooncarie, 1 foot 10 inches above summer level; at Menindie, 10 inches above summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 27.

Sun rises at 6.26, sets at 5.37; Moon, 7.19 p.m., 6.51 a.m.; Mercury, 6.48 a.m., 6.46 p.m.; Venus, 7.51 a.m., 7.59 p.m.; Mars, 3.55 a.m., 1.46 p.m.; Jupiter, 7 a.m., 6.23 p.m.; Saturn, 3.4 a.m., 12.58 p.m. New moon, 10th; full moon, 26th.

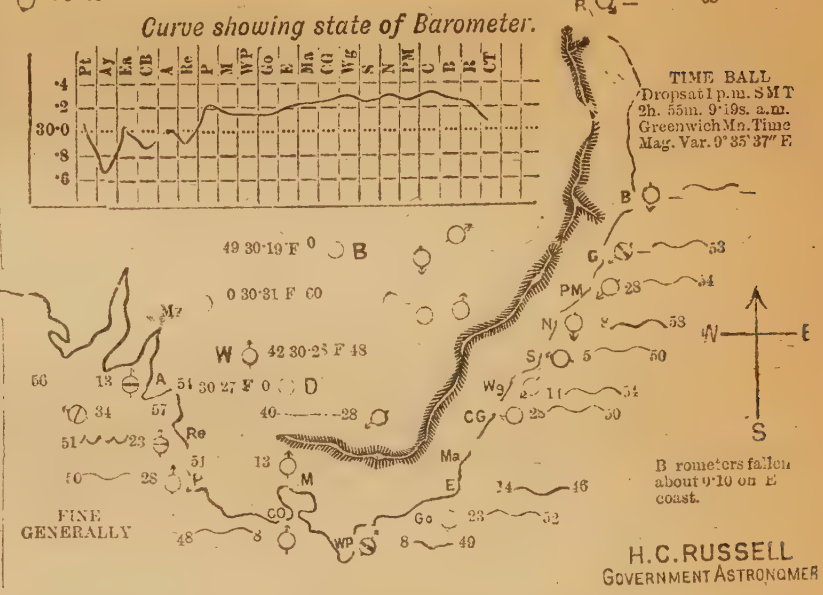
High water at Fort Denison, August 27: 9.8 a.m., 9.25 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 27, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	70	33	0
Armidale	b	56	36	0
Balranald	b	78	26	0
Bathurst ..	b	59	26	0
Bend'meer	n	63	30	0
Bodalla ..	–	—	—	—
Bourke ..	b	70	36	0
Camd'n H.	b	62	49	0·19
C. St. Geo.	b	58	42	0
Carcoar ..	n	51	36	0
Casino	b	68	41	0
Cassilis ..	g	56	42	0
Clarence ..	u	63	50	1·12
Condob'lin	b	47	26	0
Cooma	n	61	22	0
Coonab'n.	b	68	24	0
Coonamble	b	—	—	0
Cowra	b	62	52	0
Deniliquin	b	67	28	0
Dubbo ..	b	66	34	0
Eden	c	56	39	0
Euston ..	b	76	29	0
Forbes....	b	61	32	0
Glen Innes	b	75	34	0
Goulburn	f	62	30	0
Grafton ..	b	70	45	0
Gunnedah	b	67	44	0
Hay	b	64	35	0
Hill End	b	—	—	0
Inverell ..	b	55	25	0
Kiandra ..	n	61	14	0
Lismore ..	p	70	50	0
Maitland ..	n	54	47	0
Marsdens	b	65	41	0
Menindie	b	63	43	0
Molong ..	b	64	31	0
Moree	b	77	41	0
Moruya ..	–	–	—	—
Moss Vale	b	49	28	0
M. Victoria	n	50	31	0
Mudgee ..	b	72	29	0
Murrumbh	b	61	32	0
Murr'r'ndi	f	57	49	0
Mus'lbrook	g	69	36	0
Narrabri ..	b	75	41	0
Newcastle	b	60	47	0·02
Nowra		—	—	—
Orange ..	b	51	29	0
Picton	b	58	34	0
P.M'quarie	b	63	45	0
P.Stephens	c	79	46	0·20
Qu'nbeyan	b	51	36	0
Quirindi ..	b	68	40	0
Singleton	b	62	41	0
SYDNEY ..	b	58	45	0
Tamworth	–	—	—	—
Taralga ..	n	59	27	0
Taree	b	65	44	0·01
T'nt'rfield	b	65	34	0
Wagga....	n	60	29	0
Walcha ..	c	56	38	0
Walgett ..	b	—	36	0
Wentw'rth	c	67	36	0
Wilcannia	b	—	—	0
Woll'ng ng	b	66	42	0
Young ..	b	78	32	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 27 .. ..32·823
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.P. gives the state of the weather at 9 a.m., b fair or fine; c, clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; R'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown: – 12, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy, with light westerly winds and moderate sea. Rainfall: Perth, 0·05.

South Australia reports weather generally cloudy and dull inland to Beltana, squally on coast; winds fresh from N.E. to N.W. Moderate sea and falling barometers on coast. No rain.

Victoria.—Generally fine and clear. Smooth sea, falling barometers, and light N. winds on coast. Rainfall: Lakes Entrance, 0·01.

Tasmania.—Fine, but cloudy; light E. breeze on north coast.

New Zealand.—Russell: Barometer 30·10, wind calm and fine. Wellington: Barometer 29.80, wind N.W., fine. Bluff: Barometer 29.60, wind S.W., strong, showery.

New South Wales.—Generally fine and clear; cloudy in places in N.W. and W. (See details in map.) Smooth sea, falling barometers, and fresh S.W. wind on coast. Rainfall: Clarence Heads, 1.12. Calm and clear inland.

Queensland.—Generally fine and clear on E. coast, with S.E. winds and moderate sea. Rainfall: Cape Moreton, 0·52. Light rain falling at Townsville.

9 P.M. OBSERVATIONS.

Victoria.—Barometers falling. Melbourne, N., 18, cloudy, temperature 58; Cape Otway, N.E., 6, gloomy, smooth sea, temperature 58°; Portland, N.W., 48, threatening rain, smooth sea, temperature 58°; Wilson's Promontory, N.E., 12, cloudy, smooth sea, temperature 55°.

New South Wales.—Albury, S.W., fine, temperature 54°; Cape St. George, N., 42, fine, smooth sea, temperature 59°; Clarence River, S., 14, fine, moderate sea, temperature 64°; Deniliquin, N., fine, temperature 63°; Eden, N.E., 14, fine, smooth sea, temperature 57°; Goulburn, calm, fine, temperature 56°; Newcastle, E., 14, fine, smooth sea, temperature 59°; Port Macquarie, S.E., 28, fine, moderate sea, temperature 68°; Sydney, E.N.E., 14, fine, smooth sea, temperature 58.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 2 inches above summer level; at Hay, 6 feet above summer level; at Balranald, 2 feet 7 inches above summer level. Murray: At Albury, 8 feet 3 inches above summer level; at Euston, 6 feet 3 inches above summer level. Darling: At Wentworth, 4 feet above summer level; at Pooncarie, 1 foot 10 inches above summer level; at Menindie, 0·9 inches above summer level; at Wilcannia, low; Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 28.

Sun rises at 6.25, sets at 5.37; Moon, 8.16 p.m., 7.25 a.m.; Mercury, 6.42 a.m., 6.40 p.m.; Venus, 7.50 a.m., 8 p.m.; Mars, 3.54 a.m., 1.46 p.m.; Jupiter, 6.57 a.m., 6.21 p.m.; Saturn, 3 a.m., 12.54 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 28: 9.42 a.m., 9.59 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 28, 1885.

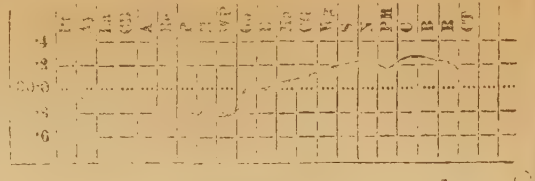
Stations	W.T.	Max.	Min.	R
Albury	[illegible]	[illegible]	39	0
Armidale	b	62	34	0
Balranald	b	70	34	0
Bathurst	b	66	27	0
Bend'meer	n	66	27	0
Bodalla	c	66	37	0
Bourke	b	77	39	0
Camd'n H.	b	61	48	0
C. St. Geo.	c	59	43	0
Carcoar	b	62	26	0
Casino	b	72	[illegible]	0
Cassilis	b	[illegible]	26	0
Clarence	[illegible]	[illegible]	40	0
Condob'lin	b	[illegible]	[illegible]	0
Cooma	c	[illegible]	[illegible]	0·2
Coonab'n.	b	69	24	0
Coonamble	b	—	—	0
Cowra	b	[illegible]	[illegible]	0
Deniliquin	c	[illegible]	40	0
Dubbo	b	71	[illegible]	0
Eden	c	[illegible]	[illegible]	0
Euston	b	71	29	0
Forbes	b	69	31	0
Glen Innes	b	72	31	0
Goulburn	b	62	35	0
Grafton	b	83	45	0
Gunnedah	b	68	44	0
Hay	b	68	38	0
Hill End	b	—	—	0
Inverell	b	61	33	0
Kiandra	c	47	30	0
Lismore	b	75	48	0
Maitland	b	48	38	0
Marsdens	n	66	41	0
Menindie	b	69	46	0
Molong	b	65	38	0
Moree	b	76	40	0
Moruya	g	61	42	0
Mount Vic.	c	53	36	0
Mt. Victoria	c	54	37	0
Mudgee	b	73	24	0
Murrumbidgee	—	—	—	—
Murr'i'ndi	b	59	37	0
Mus'lbrook	b	66	30	0
Narrabri	b	75	40	0
Newcastle	b	61	50	0
Nowra	c	64	40	0
Orange	n	51	30	0
Picton	g	61	34	0
P.M'quarie	b	64	45	0
P.Stephens	b	79	46	0
Qu'nbeyan	b	54	34	0
Quirindi	b	71	33	0
Singleton	b	65	55	0
SYDNEY	g	59	45	0
Tamworth	—	—	—	—
Taralga	b	61	30	0
Taree	b	69	43	0
T'nt'rfield	b	68	35	0
Wagga	c	66	37	0
Walcha	f	60	32	0
Walgett	b	—	37	0
Wentw'rth	c	69	45	0
Wilcannia	b	—	—	0
Woll'ng'ng	g	74	47	0
Young	b	74	33	0

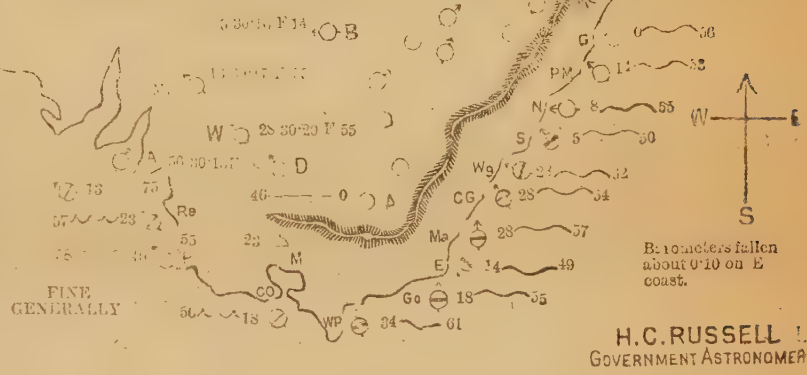
SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·4s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 27 years from Jan. 1st to July 31 ..... [illegible]
Total Rainfall from January 1st to Aug 28 ..... 32·[illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.

28 30·36 R 72

Curve showing state of Barometer.





H.C.RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for bluesky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening; the next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and unsettled; showery on south coast with rather rough sea; wind S.W. Rainfall: Albany, 0.60; Perth, 0·06; Esperance Bay, 0.16.

South Australia.—Fine and clear inland, scattered clouds with fresh N.E. to N.W. winds; falling barometers and rough sea on coast. No rain.

Victoria.—Generally cloudy on coast; squally from N.W.; sea smooth at Portland and rough at Cape Otway; barometers falling; fine but cloudy inland; at Echuca fine and clear; with hoar frost at night at Omeo. No rain.

Tasmania.—Cloudy and dull on north coast with fresh N.N.W. winds. Rainfall, 0.03 at Low Heads.

New Zealand.—Russell: Barometer 30·10, wind S.W., fine. Wellington: Barometer 29.90, wind S.E., showery; rain, 0.22. Bluff: Barometer 30.00, wind S.W., dull.

New South Wales.—Generally fine and clear, with light N.W. winds and falling barometers; cloudy in places on coast S. of Sydney, but no rain falling; sea smooth, and winds N.N.W. (Details in map above.)

Queensland.—Generally fine and clear on E. coast, winds S., sea moderate. Rainfall—Cape Moreton, 0·03.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, N.W., strong, fine, temperature 62°; Cape St. George, N., 42, half clouded, smooth sea, temperature 65°; Clarence River, N.E., fine, smooth sea, temperature 64°; Deniliquin, calm, fine, temperature 60°; Dubbo, N.W., 14, fine, temperature 59°; Eden, N.N.E., 14, fine, smooth sea, temperature 64°; Forbes, N., 14, light clouds, fine, temperature 72°; Goulburn, W., light, fine, temperature 58°; Menindie, N.W., 42, dusty, fine, temperature 62°; Moruya, N.N.W., 28, fine, half clouded, smooth sea, temperature 65°; Newcastle, N.W, fine, smooth sea, temperature 70°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 70°; Sydney, calm, cloudy, close, smooth sea, temperature 67°; Wentworth, N., 28, fine, temperature 65°.

Victoria.—Melbourne, N.W., 18, dull, squally, temperature 68°; Cape Otway, N.W., 13, light rain, squally, rough sea, temperature 61°; Portland, W., 40, showery, smooth sea, temperature 56°; Wilson's Promontory, W.N.W., 28, quarter-clouded, moderate sea, temperature 67°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 9 inches above summer level; at Hay, 6 feet 7 inches above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, 3 feet 4 inches above summer level; at Euston, 6 feet 5 inches above summer level. Darling: At Wentworth, 4 feet 8 inches above summer level; at Pooncarie, 1 foot 9 inches above summer level; at Menindie, 8 inches above summer level; at Wilcannia, low; Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 28.

Sun rises at 6.24, sets at 5.38; Moon, 9.14 p.m., 8 a.m.; Mercury, 6.36 a.m., 6.32 p.m.; Venus, 7.49 a.m., 8.2 p.m.; Mars, 3.53 a.m., 1.45 p.m.; Jupiter, 6.54 a.m., 6.18 p.m.; Saturn, 2.56 a.m., 12.51 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 29: 10.16 a.m., 10.34 p.m.

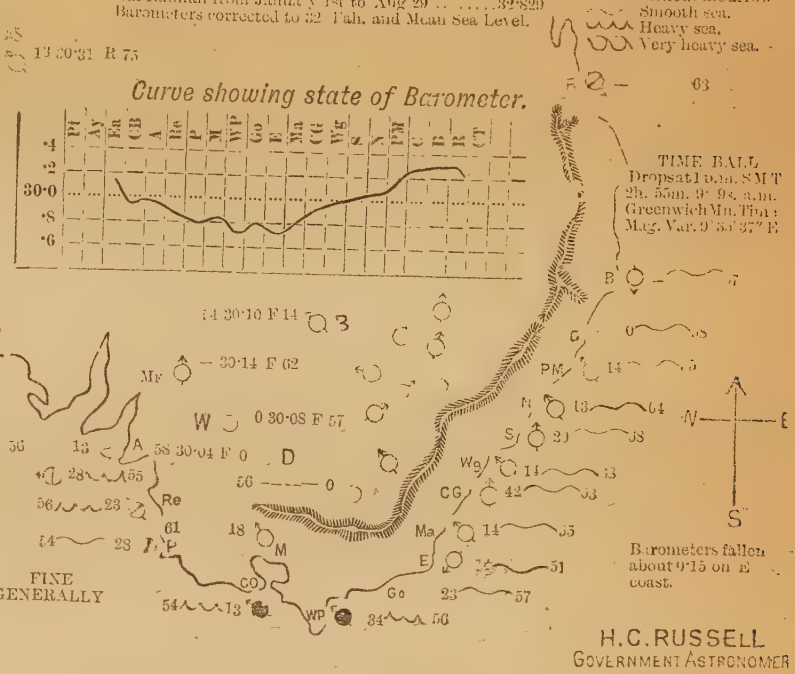
METEOROLOGICAL REPORTS AND MAP FOR AUGUST 29, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	b	72	45	0
Armidale	b	65	39	0
Balranald	b	83	38	0
Bathurst..	b	69	34	0
Bend'meer	n	63	29	0
Bodalla ..	b	75	38	0
Bourke ..	b	77	48	0
Camd'n H.	b	68	47	0
C. St. Geo.	b	64	53	0
Carcoar ..	b	55	45	0
Casino	–	—	—	—
Cassilis .	b	84	41	0
Clarence ..	b	78	41	0
Condob'lin	b	63	49	0
Cooma	b	66	37	0
Coonab'n.	n	74	28	0
Coonamble	b	—	—	0
Cowra	b	62	53	0
Deniliquin	b	78	44	0
Dubbo ..	b	75	32	0
Eden	b	65	50	0
Euston ..	b	84	44	0
Forbes....	b	71	35	0
Glen Innes	b	71	30	0
Goulburn	b	66	47	0
Grafton ..	b	86	46	0
Gunnedah	b	71	43	0
Hay	b	75	41	0
Hill End	b	—	—	0
Inverell ..	b	65	13	0
Kiandra ..	b	51	39	0
Lismore ..	–	—	—	—
Maitland..	b	55	45	0
Marsdens	n	71	46	0
Menindie	b	81	54	0
Molong ..	b	65	38	0
Moree	b	83	45	0
Moruya ..	b	71	40	0
Moss Vale	b	—	—	0
M. Victoria	b	61	45	0
Mudgee ..	b	74	28	0
Murrumbh	b	74	51	0
Murr'r'ndi	b	65	44	0
Mus'lbrook	b	75	41	0
Narrabri ..	b	79	40	0
Newcastle	b	71	51	0
Nowra	b	—	—	0
Orange ..	b	57	35	0
Picton	b	68	36	0
P.M'quarie	b	69	44	0
P.Stephens	b	82	48	0
Qu'nbeyan	b	60	40	0
Quirindi ..	b	78	40	0
Singleton	b	73	61	0
SYDNEY ..	b	70	51	0
Tamworth	–	—	—	—
Taralga ..	b	66	42	0
Taree	b	73	45	0
T'nt'rfield	–	—	—	—
Wagga.....	b	74	40	0
Walcha ..	–	—	—	—
Walgett ..	b	—	36	0
Wentw'rth	b	85	47	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	70	58	0
Young .	b	79	40	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to July 31 ....35·466
Total Rainfall from January 1st to Aug 29 .. ..32·829
Barometers corrected to 32 Fah. and Mean Sea Level.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fair or fine day; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing shower; r, rain; s, snow; t, thunder; a, threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature, r in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Mc, Mackay; Mt, Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and squally from W. at Esperance Bay. Rainfall, 0·56.

South Australia reports weather generally fine inland, with light northerly winds and calms; dull on and near coast, with strong northerly to westerly winds, rising barometers, and rough sea; dense fog in morning at Streaky Bay. Rainfall: Cape Borda, 0·04; Robe, 0·04; M'Donnell Bay, 0·03.

Victoria.—Generally cloudy on coast, showery in places; fine and clear inland at Echuca, with strong N. wind. Rainfall: Portland, 0·36. Cape Otway, 0·14; Wilson's Promontory, 0·30.

Tasmania.—Hazy on N. coast, with strong N. wind. Rainfall, 0·12 at Low Heads.

New South Wales.—Generally fine and clear throughout, with fresh north-westerly winds and falling barometers; calm at places inland; fresh northerly winds and sea smooth on coast. (Details in map.)

Queensland.—Generally fine on E. coast, with S.E. winds and moderate sea. Rainfall: Cooktown, 0·40. Cloudy at Rockhampton and Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegrams; Cape Otway, N.W., 12, foggy, with rain, high sea, temperature 52°; Portland, W., 30, showery, smooth sea, temperature 54°; Wilson's Promontory, W.N.W., 36, fierce squalls of wind, rough sea, temperature 56°.

New South Wales.—Clarence River, N.E., 10, hazy, smooth sea, temperature 71°; Moruya, N.W., 12, hazy, hot, smooth sea, temperature 81°; Sydney, fine, warm, temperature 81°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 8 inches above summer level; at Hay, 6 feet above summer level; at Balranald, 7 feet 4 inches above summer level. Murray: At Albury, 3 feet 4 inches above summer level; at Euston, 6 feet 7 inches above summer level. Darling: At Wentworth, 4 feet above summer level; at Pooncarie, 1 foot 8 inches above summer level; at Menindie, 7 inches above summer level; at Wilcannia, low; at Bourke, low.

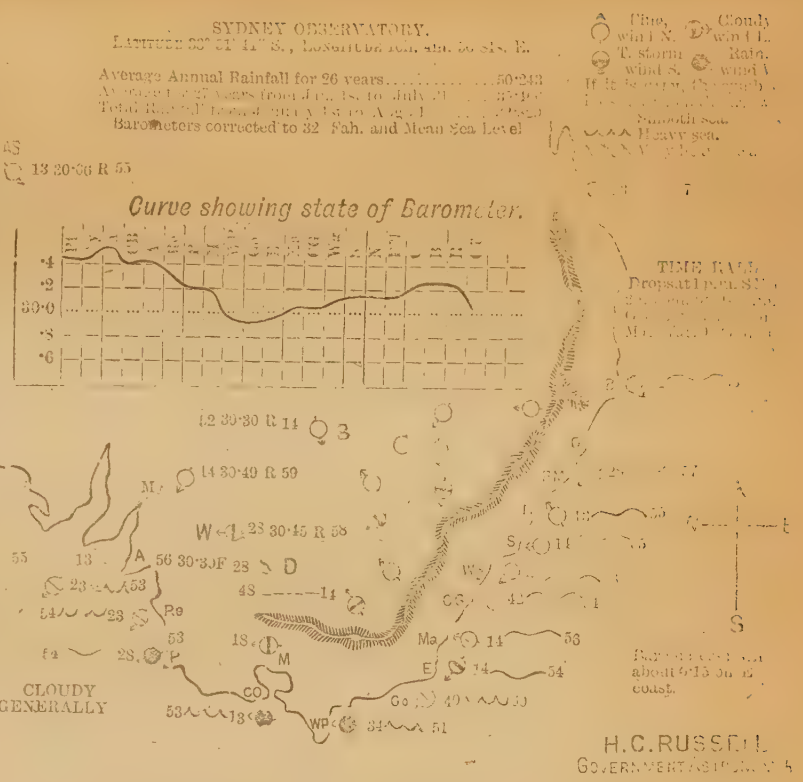
ASTRONOMICAL MEMORANDA FOR AUGUST 31.

Sun rises at 6.21, sets at 5.40; Moon, 11.14 p.m., 9.15 a.m.; Mercury, 6.24 a.m., 6.16 p.m.; Venus, 7.47 a.m., 8.6 p.m.; Mars, 3.50 a.m., 1.43 p.m.; Jupiter, 6.47 a.m., 6.12 p.m.; Saturn, 2.48 a.m., 12.45 p.m. New moon, 10th; full moon, 26th.

High water at Fort Denison, August 31: 11.30 a.m., 11.52 p.m.

METEOROLOGICAL REPORTS AND MAP FOR AUGUST 31, 1885

Stations	Wi	Max	Min	Rain
Albury ..	u	76	43	0·37
Armidale	b	65	37	0
Balranald	u	83	38	0·16
Bathurst ..	b	74	36	0·07
Bend'meer	g	69	34	0·1
Bodalla ..	n	84	29	0
Bourke ..	b	79	41	0
Camd'n H.	b	81	52	0
C. St. Geo.	b	61	45	0
Cooeoar ..	r	62	41	0·17
Casino	b	86	48	0
Cassilis .	b	72	44	0
Clarence ..	b	82	50	0
Condob'lin	b	47	31	0·05
Cooma	c	60	28	0·12
Coonab'n.	c	76	33	0
Coonamble	b	—	—	0
Cowra	u	69	55	0·11
Deniliquin	u	77	40	0·12
Dubbo ..	b	72	28	0·01
Eden	u	59	47	0
Euston ..	d	61	40	0
Forbes....	b	81	34	0·08
Glen Innes	b	78	32	0·03
Goulburn	b	52	38	0·09
Grafton ..	b	89	55	0
Gunnedah	b	80	39	0
Hay	c	64	35	0·05
Hill End	u	—	—	0·10
Inverell ..	b	72	50	0
Kiandra ..	s	55	29	0
Lismore ..	b	82	58	0
Maitland ..	—	—	—	..
Marsdens	n	74	46	0·05
Menindie	b	86	49	0
Molong ..	o	69	37	0
Moree	b	84	40	0
Moruya ..	c	62	45	0
Moss Vale	—	—	—	--
M. Victoria	b	68	34	0
Mudgee ..	c	81	31	0
Murrumbh	c	48	50	0·0
Murr'r'ndi	c	65	43	0
Mus'lbrook	b	85	42	0
Narrabri ..	b	76	38	0
Newcastle	b	83	47	0
Nowra	b	74	50	0
Orange ..	g	59	35	0·05
Picton	b	74	51	0
P.M'quarie	b	80	48	0
P.Stephens	b	83	48	0
Qu'nbeyan	b	66	42	0
Quirindi ..	b	72	40	0
Singleton	b	80	41	0
SYDNEY ..	b	81	50	0
Tamworth	b	76	37	0·10
Taralga ..	b	71	37	0·15
Taree	b	85	51	0·01
T'nt'rfield	—	—	—	—
Wagga....	d	60	39	0·04
Walcha ..	b	69	36	0·05
Walgett ..	b	—	38	0
Wentw'rth	g	66	44	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	80	52	0
Young ..	u	76	31	0·10



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m. b, balmy; c, cloudy; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Max, gives the maximum temperature for previous 24 hours. Min the corresponding minimum temperature; rain the rain for the previous 24 hours. The symbols used in the annexed explained on the map. At each coast station the wind symbols placed like a vane pointing to the direction from which the wind is coming. A clear circle with a means fine weather; a circle with bar, cloudy weather; and a black spot, rain. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. [illegible] bay, Wg, Wodongong; S, Sydney; N, New[illegible] River; B, Brisbane; R, Rockhampton; Cl, Cooktown; [illegible] barometer is given in figures at Albury, Deniliqu'n, [illegible] Springs. [illegible] beginning in Western Australia, and passing along eastwards; [illegible] ing them, and southerly following.

Western Australia.—Generally fine [illegible]

South Australia.—Weather generally dull and wet to Quorn; and showery at many stations. Winds fresh from S.W. to W. Light rains recorded south of Quorn (very [illegible] received over Mount Lofty Ranges; rough sea, fresh S.W. winds and rising barometers on coast; S.E. winds and fine in Northern Territory. Rainfall: Eucla, 0·01; Streaky Bay, 0·34; Cape Borda, 0·18; Adelaide, 0·24; Robe, 0·28; M'Donnell Bay, 0·10.

Victoria.—Cloudy and showery on coast, with fresh W. winds, rough sea and rising barometers. Strong W. wind and sky half clouded at Echuca. Rainfall: Portland, 0·39; Melbourne, 0·29; Wilson's Promontory, 1·45 (severe hailstorm from S.W. on Sunday); Cape Otway, 0·07; Lake Entrance, 0·56.

Tasmania.—Fine and clear on north coast, with strong W.S.W. wind. Rainfall: Low Heads, 30th, 0·09.

New Zealand.—Russell, barometer 30·10, wind N.W., showery; Wellington, barometer 29·60, N.W. gale and showery; Bluff, barometer 29·30, wind N.W., dull and showery.

New South Wales.—Generally fine and clear, with light N.W. to S.W. winds and rising barometers; cloudy in the southern and S.W. parts; Kiandra reports snowing, 4 inches having fallen up to 9 a.m.; smooth sea, fresh S.W. to N.W. winds, rising barometers, and fine clear weather on coast. Temora reports weather unsettled; rainfall, 0·11. (General details of weather will be found in map above.)

Queensland.—Fine in southern parts, showery in N. at Cooktown and Townsville, winds S.E. to S.W.; sea moderate. Rainfall—Brisbane, 0·07; Rockhampton, 0·02.

[illegible] temperature 55°; Port Lincoln, W.S.W., [illegible] perature 54°; Wilson's Promontory, W., [illegible] temperature 53°.

New South Wales.—Albury, S.W., dull, temperature 51°; Cape St. George, W., 42, fine, smooth sea, temperature 61°; Clarence River, S.E., fine, smooth sea, temperature 66°; Deniliquin, [illegible] dull, temperature 67°; Dubbo, S.W., [illegible] S.W., 28, fine, slight sea, temperature 62°; Forbes, calm, dull, temperature 50°; Goulburn, N.W., fine, temperature 52°; Moruya, E., 27, fine, temperature 65°; Newcastle, W., fine, smooth sea, temperature 68°; Port Macquarie, S.S.E., 28, fine, smooth sea, temperature 69°; Sydney, W.S.W., 8, fine, smooth sea, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 6 inches above summer level; at Hay, 6 feet 3 inches above summer level; at [illegible] 4 feet above summer level. Murray: At Albury, 2 feet 6 inches above summer level; at Euston, 6 feet 3 inches above summer level. Darling: At Wentworth, 5 feet 2 inches above summer level; at Pooncarie, 1 foot 6 inches above summer level; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR AUGUST 31.

Sun rises at 6.20, sets at 5.40; Moon, — p.m., 9.56 a.m.; Mercury, 6.19 a.m., 6.9 p.m.; Venus, 7.47 a.m., 8.7 p.m.; Mars, 3.18 a.m., 1.42 p.m.; Jupiter, 6.44 a.m., 6.10 p.m.; Saturn, 2.45 a.m., 12.41 p.m. New moon, 9th; full moon, 2.th.

High water at Fort Denison, September 1: — a.m., 12.13 p.m.

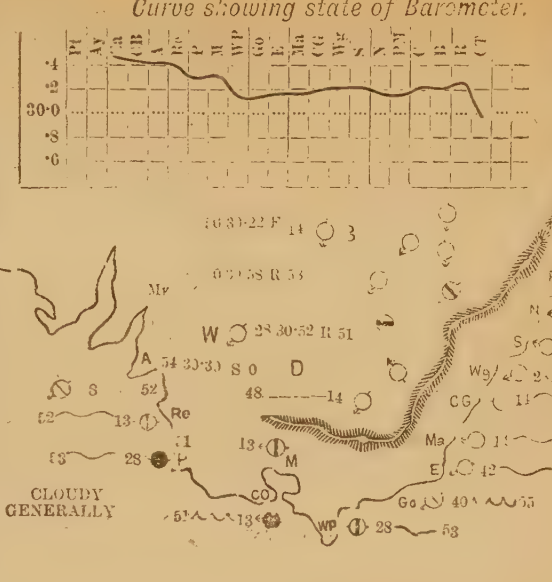
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 1, 1885.

Stations	wt	Mx	Mn	r	in
Albury ..	b	58	34	0·03	
Armidale	b	62	33	0	
Balranald	b	66	39	0	
Bathurst ..	g	51	40	0	
Bend'meer	b	58	31	0	
Bodalla ..	b	—	—	0	
Bourke ..	b	69	41	0	
Camd'n H.	b	66	51	0	
C. St. Geo.	b	66	47	0	
Carcoar ..	b	48	44	0·07	
Casino	b	75	35	0	
Cassilis .	b	58	41	0	
Clarence ..	b	80	48	0	
Condob'lin	b	51	29	0	
Cooma ...	n	63	27	0	
Coonab'n.	b	66	30	0	
Coonamble	b	—	—	0	
Cowra	b	60	55	0	
Deniliquin	b	66	35	0	
Dubbo ..	c	66	30	0	
Eden	c	65	47	0	
Euston ..	g	64	42	0	
Forbes....	b	51	39	0·14	
Glen Innes	b	60	31	0	
Goulburn	b	54	39	0	
Grafton ..	b	84	51	0	
Gunnedah	b	66	41	0	
Hay	b	63	39	0	
Hill End	b	—	—	0	
Inverell ..	b	59	12	0	
Kiandra ..	n	42	31	0	
Lismore ..	b	78	44	0	
Maitland ..	b	—	—	0	
Marsdens	b	66	48	0	
Menindie	b	68	47	0	
Molong ..	b	57	40	0·03	
Moree	b	73	42	0	
Moruya ..	b	72	41	0	
Moss Vale	b	—	—	0	
M. Victoria	b	50	38	0	
Mudgee ..	b	66	35	0	
Murrumbh	c	62	43	0	
Murr'r'ndi	b	60	39	0	
Mus'lbrook	b	69	37	0	
Narrabri'..	b	79	39	0	
Newcastle	b	78	46	0	
Nowra	–	–	–	—	
Orange ..	g	49	40	0	
Picton	b	62	49	0	
P.M'quarie	b	68	49	0	
P.Stephens	b	78	47	0	
Qu'nbeyan	b	57	40	0	
Quirindi ..	b	70	39	0	
Singleton	b	78	51	0	
SYDNEY ..	b	66	51	0	
Tamworth	b	61	50	0	
Taralga ..	b	60	42	0	
Taree	b	71	45	0	
T'nt'rfield	b	62	29	0	
Wagga....	b	56	37	0	
Walcha ..	n	54	30	0	
Walgett ..	b	—	39	0	
Wentw'rth	b	66	43	0	
Wilcannia	b	—	—	0	
Woll'ng ng	b	70	52	0	
Young .	g	65	38	0·02	

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·213
Average for 27 years from Jan. 1st to Aug 31 ..... 3·308
Total Rainfall from January 1st to September 1 ... 32·829
Barometers corrected to 32 Fah. and Mean Sea Level.



Fine, wind N.
Cloudy wind E.
T. storm wind S.
Rain, wind W.
Fog is cast, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, blanking for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; z, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—P., Perth; Ay., Albany; Ea., Eucla; CB., Cape Borda; A. Adelaide; Re. Robe; P. Portland; M. Melbourne, W.P. Wilson's Promontory; Go. Gabo; E. Eden; Ma. Moruya, C.G. Jervis Bay, Wg. Wollongong; S. Sydney; N. Newcastle; P.M. Port Macquarie; C. Clarence River; B. Brisbane; R. Rockhampton; Ct. Cooktown; Men'ndi, Mf. inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Esperance Bay, fine and clear, light N.W. wind, and smooth sea.

South Australia reports weather generally dull inland to Quorn; showery in places; clearing in west; winds S.W. to W.; fine but cloudy north of Daly Waters; moderate sea and rising barometers on coast. Rainfall: Cape Borda, 0·01; Robe, 0·63.

Victoria.—Cloudy on coast, showery in S.W.; sea moderate and rough; barometers rising: wind fresh, from west; fine inland, at Echuca; foggy at Omeo. Rainfall: Portland, 0·07; Otway, 0·05; Wilson's Promontory, 0·12.

Tasmania.—Fine and clear on north coast, with fresh W. wind.

New Zealand.—Russell, barometer 29·90, wind squally; Wellington, barometer 29·40, wind N.W., fine. Easterly winds over North Island. Lines down on South Island.

New South Wales.—Generally fine and very clear, with light westerly winds and rising barometers; cloudy in places on W. slopes of mountain. (See map above.) Smooth sea, rising barometers, and light S.W. to W. winds on coast.

Queensland.—Generally fine on E. coast, with S.E. to S.W. winds and moderate sea. Dull at Cooktown. Rain, 0·06.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., fine, temperature 56°; Cape St. George, S.E., 14, fine, smooth sea, temperature 62°; Clarence River, S., 14, fine, smooth sea, temperature 66°; Deniliquin, calm, fine, temperature 60°; Dubbo, W., 20, fine, temperature 57°; Eden, S.W., 28, fine, smooth sea, temperature 63°; Goulburn, W., fine, temperature 57°; Menindie, S., fine, temperature 61°; Moruya, E.N.E., 28, fine, smooth sea, temperature 61°; Newcastle, S.E., 28, fine, smooth sea, temperature 62°; Port Macquarie, S.S.W., 28, fine, smooth sea, temperature 69°; Sydney, S.E., 11, fine, smooth sea, temperature 63°; Wentworth, S.W., fine, temperature 60°.

Victoria.—Barometers falling. Melbourne, S.S.W., 12, cloudy, temperature 56°; Cape Otway, W., 4, squally rain, with rough sea, temperature 56°; Portland, W., 36, fine, smooth sea, temperature 55°; Wilson's Promontory, W., 36, squally with rain, moderate sea, temperature 51°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 6 inches above summer level; at Hay, 6 feet 9 inches above summer level; at Balranald, 6 feet 10 inches above summer level. Murray: At Albury, 2 feet 8 inches above summer level; at Euston, 7 feet 6 inches above summer level. Darling: At Wentworth, 5 feet 10 inches above summer level; at Pooncarie, 1 foot 5 inches above summer level; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

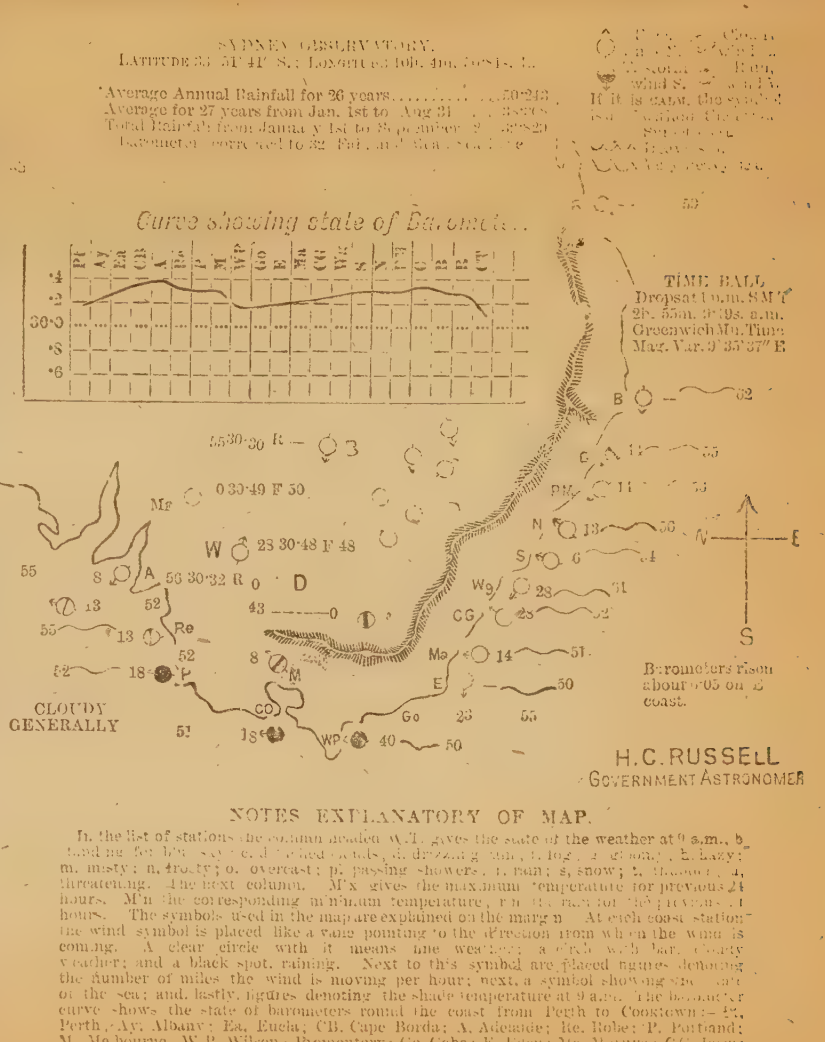
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 2.

Sun rises at 6.19, sets at 5.41; Moon, 12.14 a.m., 10.42 a.m.; Mercury, 6.12 a.m., 5.58 p.m.; Venus, 7.46 a.m., 8.9 p.m.; Mars, 3.47 a.m., 1.41 p.m.; Jupiter, 6.41 a.m., 6.7 p.m.; Saturn, 2.41 a.m., 12.37 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 2: 12.37 a.m., 1.1 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 2, 1885.

Stations	wt	Mx	mn	r'in
Albury	g	56	34	0
Armidale	b	62	34	0
Balranald	b	74	31	0
Bathurst	b	60	28	0
Bend'meer	n	62	28	0
Bodalla	b	72	29	0
Bourke	b	—	—	0
Camd'n H.	b	67	47	0
C. St. Geo.	b	64	44	0
Carcoar	b	54	36	0
Casino	b	79	41	0
Cassilis	b	60	32	0
Clarence	g	79	48	0
Condob'lin	b	49	31	0
Cooma	n	64	25	0
Coonab'n	n	66	24	0
Coonamble	b	—	—	0
Cowra	b	57	36	0
Deniliquin	b	67	35	0
Dubbo	b	68	28	0
Eden	c	65	45	0
Euston	f	72	38	0
Forbes	b	61	33	0
Glen Innes	b	66	36	0
Goulburn	b	62	33	0
Grafton	b	84	50	0
Gunnedah	b	68	41	0
Hay	o	64	36	0
Hill End	n	—	—	0
Inverell	b	61	17	0
Kiandra	n	50	28	0
Lismore	c	77	48	0
Maitland	b	58	41	0
Marsdens	b	65	42	0
Menindie	b	64	45	0
Molong	b	63	32	0
Moree	b	76	39	0
Moruya	b	67	36	0
Moss Vale	b	—	—	0
M. Victoria	b	56	39	0
Mudgee	b	78	24	0
Murrumbh	—	—	—	—
Murr'r'ndi	b	62	36	0
Mus'lbrook	b	72	35	0
Narrabri	b	75	41	0
Newcastle	b	67	45	0
Nowra	..	..	..	—
Orange	b	52	29	0
Picton	b	62	34	0
P.M'quarie	b	66	45	0
P.Stephens	b	82	46	0
Qu'nbeyan	b	—	—	0
Quirindi	b	76	40	0
Singleton	b	68	45	0
SYDNEY	b	76	46	0
Tamworth	b	65	33	0
Taralga	b	64	34	0
Taree	b	73	46	0
T'nt'rfield	b	68	33	0
Wagga	b	59	32	0
Walcha	b	61	29	0
Walgett	b	—	42	0
Wentw'rth	b	68	39	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	50	0
Young	b	76	32	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b. threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature, r'in the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Mo, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Mendindi, Md. Inland the state of barometer is given in figures at Albury, Deniliqu'n, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, with light S.E. winds and calms; sea smooth. No rain.

South Australia reports weather generally fine, scattered clouds on parts of coast, winds light and variable and calm, cloudy with light westerly winds, falling barometers, and moderate sea on coast; N.E. winds and calm inland; showery at M'Donnell Bay. Rainfall: Adelaide, 0·01; Robe, 0·01. No reports from stations north of Farina.

Victoria.—Cloudy throughout, raining on coast, with light westerly winds, steady barometers, and smooth sea. Rainfall: Portland, 0·08; Wilson's Promontory, 0·20; Cape Otway, 0·07.

Tasmania.—Fine but cloudy on N. coast, with fresh W.N.W. wind. No rain.

New Zealand.—Russell, barometer 29·80, wind S.W., fine and clear; Wellington, barometer 29·50, wind W., fine and clear; Bluff, barometer 29·20; wind S.W., 34, squally.

New South Wales.—Fine and clear throughout colony. (Details in map above.) Smooth sea, rising barometers, and light westerly winds on coast. Fine and calm inland. No rain.

Queensland.—Fine and clear on E. coast, with S.E. winds and moderate sea. Dull at Cooktown. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 13, dull, temperature 59°; Cape Otway, W., 13, light rain, foggy, rough sea, temperature 56°; Wilson's Promontory, W., 34, light rain falling, moderate sea, temperature 51°.

New South Wales.—Albury, W., fine, temperature 56°; Cape St. George, S., 28, sky half-clouded, smooth sea, temperature 60°; Deniliquin, calm, fine, temperature 60°; Eden, N.E., 14, fine, smooth sea, temperature 59°; Goulburn, N.W., fine, temperature 68°; Moruya, N.E., 28, fine, moderate sea, temperature 63°; Newcastle, W., light, fine, smooth sea, temperature 71°; Port Macquarie, N.E., 14, fine, hazy, smooth sea, temperature 71°; Sydney, N.W., 8, fine and clear, smooth sea, temperature 71°; Wentworth, calm, fine, temperature 62°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 9 inches above summer level; at Hay, 6 feet 9 inches above summer level; at Balranald, 7 feet 1 inches above summer level. Murray at Albury

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 3.

Sun rises at 6.17, sets at 5.42; Moon, 1.14 a.m., 11.34 a.m.; Mercury, 6.5 a.m., 5.47 p.m.; Venus, 7.45 a.m., 8.11 p.m.; Mars, 3.15 a.m., 1.19 p.m.; Jupiter, 6.33 a.m., 6.1 p.m.; Saturn, 2.37 a.m., 12.33 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 3: 1.33 a.m., 2.4 p.m.

METEOROLOGICAL ABSTRACT, AUGUST, 1885,

with results for the same month during the preceding 26 years:

—	Barometer at 32° Fah. and mn. sea lev'l.	Temperature in Shade.			Rainfall.	
		Mean Max.	Mean Min.	Mean.	Amount Inches.	No. of days.
August, 1885	30·074	65·5	48·4	57·0	0·040	6
Average for 27 years ...	30·101	62·8	47·3	55·1	2·842	10·4
Monthly Extremes:						
Highest ...	30·271	65·9	50·8	57·4	10·166	19
Year ...	1860.	1875.	1861.	1880.	1879.	1861.
Lowest ...	29·941	59·2	43·6	52·0	0·040	2
Year ...	1870.	1861.	1862.	1872.	1885.	1880.

Wind.—August, 1885: Prevailing direction, W.; mean miles per hour, 9·3. Average direction for 27 years, W.

Temperature.—August, 1885: Highest shade temperature, 81·9, on 29th; lowest shade temperature, 42·8, on 13th and 25th. Highest shade temperature in any August since 1859, 82·0, August 31, 1884; lowest shade temperature in any August since 1859, 35·8, August 3, 1872.

Rainfall.—August, 1885: Greatest fall in one day, 0·011, on 25th. Greatest fall in one day in any August since 1859, 5·325, August 2, 1860.

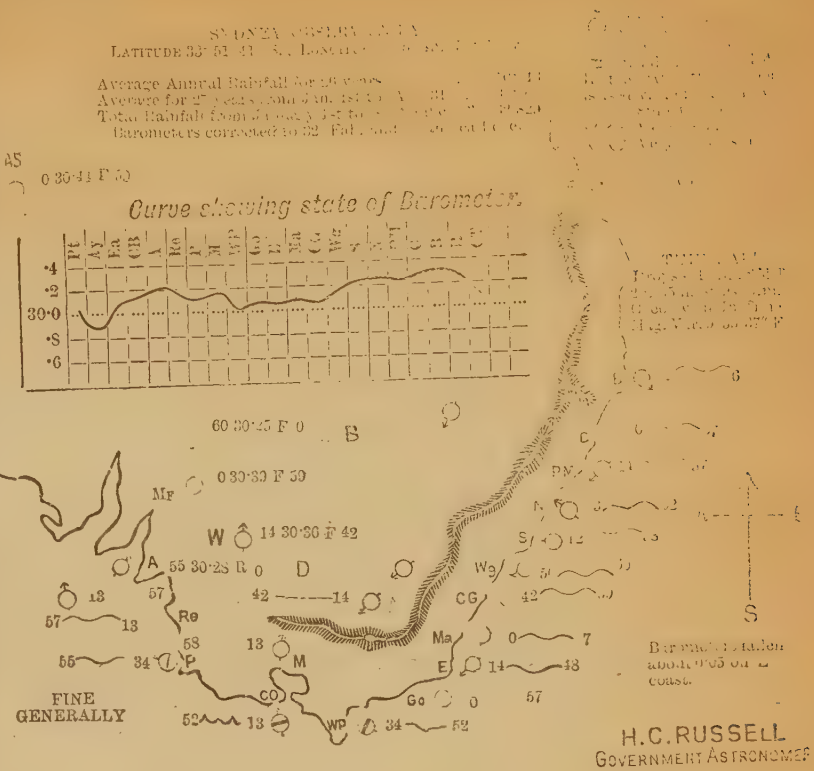
METEOROLOGICAL REPORTS AND MAP FOR

Stations	wt	Mx	Mn	R'in
Albury ..	b	66	38	0
Armidale	b	65	35	0
Balranald	b	79	31	0
Bathurst..	b	67	29	0
Bend'meer	n	67	27	0
Bodalla ..	b	70	29	0
Bourke ..	b	79	40	0
Camd'n H.	b	69	46	0
C. St. Geo.	b	64	46	0
Carcoar ..	b	54	36	0
Casino	b	79	38	0
Cassilis ..	b	63	39	0
Clarence ..	b	79	53	0
Condob'lin	b	51	33	0
Cooma....	n	72	25	0
Coonab'n.	n	76	26	0
Coonamble	b	—	—	0
Cowra	b	63	54	0
Deniliquin	b	71	35	0
Dubbo ..	b	76	29	0
Eden	b	62	49	0
Euston ..	b	75	34	0
Forbes....	b	62	32	0
Glen Innes	b	68	31	0
Goulburn	b	66	37	0
Grafton ..	f	85	51	0
Gunnedah	b	70	40	0
Hay	b	69	39	0
Hill End	b	—	—	0
Inverell ..	b	63	15	*0
Kiandra ..	n	58	30	1·54
Lismore ..	b	79	47	0
Maitland..	b	69	43	0
Marsdens	b	71	45	0
Menindie	b	72	42	0
Molong ..	b	69	36	0
Moree	b	81	40	0
Moruya ..	b	66	40	0
Moss Vale	b	62	43	0
M. Victoria	b	63	42	0
Mudgee ..	b	77	25	0
Murrumbh	b	68	46	0
Murr'r'ndi	b	65	33	0
Mus'lbrook	b	74	38	0
Narrabri ..	b	74	40	0
Newcastle	b	73	51	0
Nowra	b	73	44	0
Orange ..	n	56	30	0
Picton	b	71	36	0
P.M'quarie	b	68	43	0
P.Stephens	b	79	49	0
Qu'nbeyan	b	60	39	0
Quirindi ..	b	78	40	0
Singleton	b	63	46	0
SYDNEY ..	b	72	50	0
Tamworth	b	69	33	0
Taralga ..	b	66	40	0
Taree	b	76	42	0
T'nt'rfield	b	70	31	0
Wagga....	b	60	32	0
Walcha ..	n	62	26	0
Walgett ..	—	—	—	—
Wentw'rth	b	75	39	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	48	0
Young ..	b	80	35	0

SYDNEY OBSERVATORY.

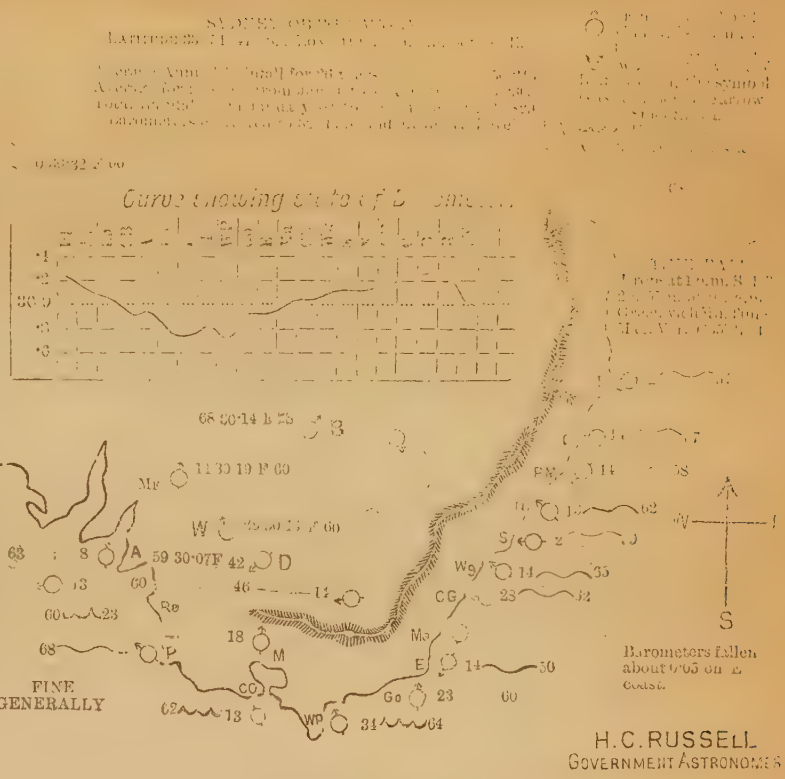
LATITUDE 33° 52′ 41″ S., LONGITUDE [illegible]

Average Annual Rainfall for [illegible] years [illegible]
Average for [illegible] years [illegible]
Total Rainfall from [illegible] to [illegible]
Barometers corrected to 32° Fah., and [illegible]


Curve showing state of Barometer.
Pt Ay Ba CB Ba Ba Ba

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 4, 1887

Stations	W.T.	M'x	M'n	R'n
Albury ..	b	72	54	0
Armidale	b	65	34	0
Balranald	b	86	47	0
Bathurst ..	b	63	38	0
Bend'meer	b	69	37	0
Bodalla ..	b	62	31	0
Bourke ..	b	91	49	0
Cann'n H.	b	72	[illegible]	0
C. St. Geo.	b	76	52	0
Carcoar ..	b	5[illegible]	38	0
Casino ..	b	8[illegible]	37	0
Cassilis ..	b	67	41	0
Clarence ..	f	79	53	0
Condob'lin	b	61	40	0
Cooma ..	n	70	26	0
Coonab'n.	n	78	26	0
Coonamble	b	—	—	0
Cowra ..	b	64	51	0
Deniliquin	b	78	45	0
Dubbo ..	b	80	31	0
Eden ..	b	70	49	0
Euston ..	b	84	39	0
Forbes ..	b	73	33	0
Glen Innes	b	73	31	0
Goulburn	b	67	35	0
Grafton ..	b	87	52	0
Gunnedah	—	—	—	—
Hay ..	b	78	41	0
Hill End	b	—	—	0
Inverell ..	b	66	16	0
Kiandra ..	n	54	23	0
Lismore ..	b	84	47	0
Maitland ..	b	72	45	0
Marsdens	b	75	46	0
Menindie	b	78	49	0
Molong ..	b	74	35	0
Moree ..	b	85	44	0
Moruya ..	b	77	38	0
Moss Vale	b	64	45	0
M. Victoria	b	63	45	0
Mudgee ..	b	80	26	0
Murrumbh	b	74	38	0
Murr'r'ndi	b	63	38	0
Mus'lbrook	b	77	36	0
Narrabri ..	b	82	41	0
Newcastle	b	77	51	0
Nowra ..	—	—	—	—
Orange ..	n	59	31	0
Picton ..	b	73	36	0
P.M'quarie	b	72	45	0
P.Stephens	b	20	61	0
Qu'nbeyan	b	65	38	0
Quirindi ..	b	83	41	0
Singleton	b	78	49	0
SYDNEY ..	b	77	50	0
Tamworth	b	74	33	0
Taralga ..	b	71	43	0
Taree ..	b	80	47	0
T'nt'rfield	b	74	34	0
Wagga ..	b	74	34	0
Walcha ..	n	66	26	0
Walgett ..	b	—	41	—
Wentw'rth	b	83	46	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	84	54	0
Young ..	b	85	34	0



H. C. RUSSELL,
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Men'ndie, Mf, inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Anco Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia reports weather fine generally; winds light and variable; barometer risen slightly; sea smooth; rain at Perth measured 0·06.

South Australia.—Weather fine generally, and dusty in parts; winds from N.E. to N.W., and rather strong; barometer fallen slightly generally; sea smooth generally, except at Robe, where it is rough.

Victoria.—Generally fine and clear; strong northerly winds, falling barometer, and rough sea on coast; fine and clear inland; no rain.

Tasmania.—Fine, but cloudy, on North coast, with light west winds; no rain.

New Zealand.—Russell, barometer 29·9, wind N.W., weather threatening and squally; Wellington, barometer 29·6, wind W., weather fine; Bluff, barometer 29·5; wind S.W., weather threatening and squally. Heavy rain and hailstorms on West coast during night, and dull in south.

New South Wales.—Fine and clear throughout, with light variable winds and calms, no rain, smooth sea, falling barometers, and light westerly winds on coast; calm and clear inland; frosty in places. (For details see map above.)

Queensland.—Generally fine and clear on E. coast, with light S.E. to S.W. winds and smooth sea; dull at Cooktown; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers falling, N.W., 30, squally, temperature 75°; Cape Otway, W.N.W., 18, squally, misty, rough sea, temperature 62°; Portland, W.N.W., 42, threatening rain, smooth sea, temperature 58°; Wilson's Promontory, W., 42, cloudy, moderate sea, temperature 62°.

New South Wales.—Albury, S.W., 12, dusty; Cape St. George, N., 14, fine, smooth sea, temperature 74°; Dubbo, N.W., 28, fine and hazy, temperature 65°; Eden, N.N.W., 28, fine, smooth sea, temperature 76°; Goulburn, W., fine, temperature 63°; Moruya, N.W., 42, fine and hazy, smooth sea, temperature 78°; Newcastle, W., 28, fine, smooth sea, temperature 78°; Port Macquarie, N.E., 14, fine and hazy, smooth sea, temperature 73°; Sydney, N.N.W., 12, fine, smooth sea, temperature 79.°

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 6 inches above summer level; at Hay, 6 feet 6 inches above summer level; at Balranald, 8 feet above summer level. Murray: At Albury, 2 feet 11 inches above summer level; at Euston, 8 feet 3 inches above summer level. Darling: At Wentworth, 6 feet 7 inches above summer level; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 5.

Sun rises at 6.15, sets at 5.43; Moon, 3.10 a.m., 1.32 p.m.; Mercury, 5.50 a.m., 5.25 p.m.; Venus, 7.43 a.m., 8.15 p.m.; Mars, 3.42 a.m., 1.38 p.m.; Jupiter, 6.31 a.m., 5.58 p.m.; Saturn, 2.30 a.m., 12.26 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 5: 4.10 a.m., 4.54 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 5, 1885.

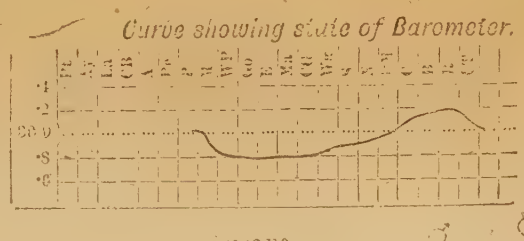
Stations	wt	Mx	MYR'in	
Albury ..	b	74	45	0
Armidale	b	71	39	0
Balranald	b	83	33	0
Bathurst..	b	74	36	0
Bend'meer	b	70	31	0
Bodalla ..	b	70	28	0
Bourke ..	b	90	51	0
Camd'n H.	b	72	48	0
C. St. Geo.	b	62	52	0
Carcoar ...	b	60	42	0
Casino	b	88	59	0
Cassilis .	b	70	42	0
Clarence ..	b	78	57	0
Condob'lin	b	88	43	0
Cooma ...	c	59	47	0
Coonab'n.	b	79	30	0
Coonamble	b	—	—	0
Cowra	b	65	51	0
Deniliquin	b	81	42	0
Dubbo ..	b	—	—	0
Eden	b	76	55	0
Euston ..	b	84	47	0
Forbes	b	77	44	0
Glen Innes	b	74	41	0
Goulburn	b	72	49	0
Grafton ..	b	84	49	0
Gunnedah	b	77	44	0
Hay	b	79	41	0
Hill End	b	—	—	0
Inverell ..	c	69	—	0
Kiandra ..	u	56	40	0
Lismore ..	b	85	51	0
Maitland..	b	75	43	0
Marsdens	b	77	60	0
Menindie	b	80	55	0
Molong ..	b	—	—	0
Moree	b	85	52	0
Moruya ..	c	80	50	0
Moss Vale	b	66	46	0
N. Victoria	b	66	48	0
Nudgee ...	n	7-	30	0
Murrumbh.	b	77	46	0
Murr'rindi	b	70	47	0
Nas'lbrook	b	81	43	0
Narrabri ..	b	80	39	0
Newcastle	b	80	54	0
Nowra	b	81	—	0
Orange ..	n	62	33	0
Picton	b	74	37	0
P.M'quarie	b	72	44	0
P.Stephens	b	81	48	0
Qu'nbeyan	b	66	41	0
Quirindi ..	b	83	42	0
Singleton	b	70	49	0
SYDNEY ..	b	79	59	0
Tamworth	—	—	—	—
Taralga ..	b	71	42	0
Taree	b	80	46	0
T'nt'rfield	b	77	39	0
Wagga....	b	51	44	0
Walcha ..	n	68	25	0
Walgett ..	b	—	47	0
Wentw'rth	b	84	49	0
Wilcannia	b	—	—	0
Woll'ng ng	b	84	57	0
Young ..	b	80	37	0

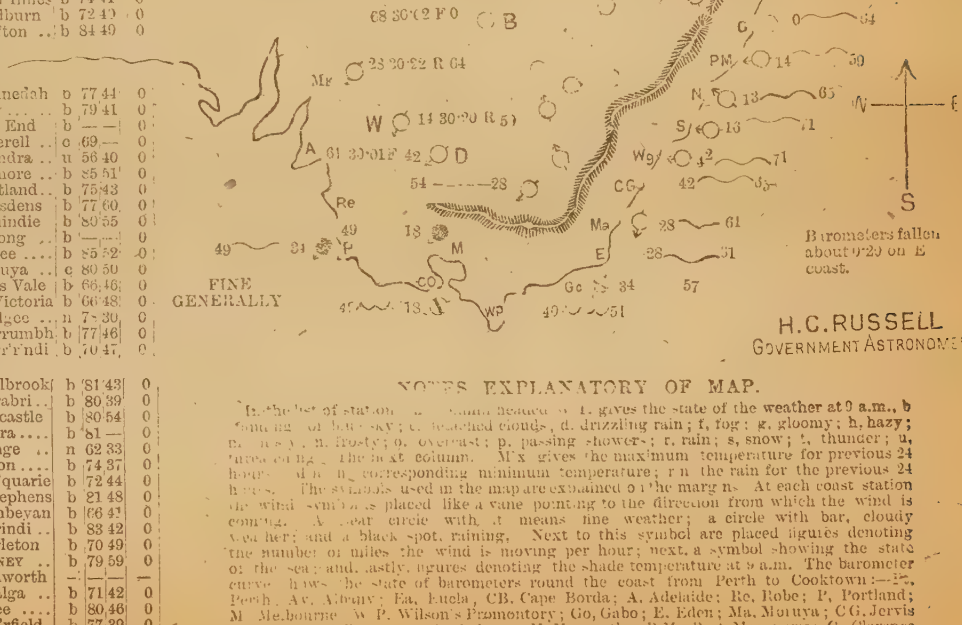
SYDNEY OBSERVATORY.

LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 0·243
Average for 27 years from Jan. 1st to Aug 31 .... 38·308
Total Rainfall from Jan. 1st to September 5 .. 22·229
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy wind E.
T. storm wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.





H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations [illegible] gives the state of the weather at 9 a.m., b [illegible] clear sky; c. detached clouds, d. drizzling rain; f, fog; g, gloomy; h, hazy; [illegible] frosty; o. overcast; p. passing showers; r. rain; s, snow; t., thunder; u, [illegible] The next column. Mx gives the maximum temperature for previous 24 hours [illegible] corresponding minimum temperature; r is the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—P., Perth; Av., Albany; Ea, Eucla, CB, Cape Borda; A. Adelaide; Re, Robe; P, Portland; M Melbourne W P. Wilson's Promontory; Go, Gabo; E. Eden; Ma, Moruya; C G. Jervis Bay, Wg Wollongong; S. Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River, B Brisbane; R. Rockhampton: Ct, Cooktown; Menindi, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally fine, with scattered clouds, overcast [illegible] places on and near the coast; wind, S.W., 12 to 24 miles per [illegible]ur.

Victoria.—Cloudy and showery on coast, with strong S.W. winds [illegible]d rough sea; rain in places; barometers rising, fine inland at [illegible]neo, fine but cloudy at Echuca. Rainfall: Portland, 0·11; Cape [illegible]way, 0·05; Wilson's Promontory, 0·08.

Tasmania.—Squally on N. coast with strong W. wind. Rain[illegible]: Low Heads, 0·03.

New Zealand. Russell, barometer 30·10, wind W., weather [illegible]; Wellington, barometer 29·79, wind N.W., weather fine; [illegible]uff, barometer 29·50; wind N.W., weather showery. Rough sea [illegible]oast.

New South Wales.—Fine and clear throughout, with light vari[illegible]e winds and calms, frosty on highlands; smooth sea, falling [illegible]ometers, and westerly winds on coast. (Detail in map above.)

Queensland.—Generally fine and clear, with S.E. winds and [illegible]ooth sea; dull at Cooktown; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers rising, temperature 49·; [illegible]e Otway, W.S.W., 18, squally, high sea, temperature 51·; [illegible]lson's Promontory, S.W., 48, cloudy, rough sea.

New South Wales.—Albury, S.W., 20, cloudy, temperature 60·; Cape S. George, S.F., 28, fine, smooth sea, temperature 67·; Clarence River, N.E., 10, cloudy, moderate sea, temperature 71·; Deniliquin, W., fine, temperature 60·; Dubbo, W., 14, fine, temperature 65·; Goulburn, N.W., 30, fine, temperature 62·; Menindie, S.W., fine, temperature 65·; Moruya, E., 22, fine, smooth sea, temperature 62·; Newcastle, N.W., 10, fine, smooth sea, temperature 83·; Port Macquarie, N.E., 14, hazy, smooth sea, temperature 65·; Sydney, N.W., 20, fine, hot, temperature 81·; Wentworth, W., 28, fine, temperature 66·.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet above summer level; at Hay, 6 feet 4 inches above summer level; at Balranald, 8 feet 5 inches above summer level. Murray: At Albury, 3 feet above summer level; at Euston, 8 feet 9 inches above summer level. Darling: At Wentworth, 6 feet 10 inches above summer level; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 7.

Sun rises at 6.12, sets at 5.44; Moon, 4.51 a.m., 3.43 p.m.; Mercury, 5.35 a.m., 5.3 p.m.; Venus, 7.42 a.m., 3.18 p.m.; Mars, 3.39 a.m., 1.37 p.m.; Jupiter, 6.24 a.m., 5.52 p.m.; Saturn, 2.23 a.m., 12.19 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 7: 6.41 a.m., 7.10 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 9, 1883

Stations	wt	Mx	Mn	
Albury ..	b	68	35	0
Armidale	u	72	38	0
Balranald	b	73	31	0
Bathurst ..	b	70	29	0
Bend'meer	b	67	33	0
Bodalla ..	—	—	—	—
Bourke ..	b	77	42	0
Caind'n H.	c	64	36	0
C. St. Geo.	c	76	36	0
Carcoar ..	[illegible]	[illegible]	[illegible]	[illegible]
Casino	c	[illegible]	[illegible]	[illegible]
Cooma ..	[illegible]	[illegible]	[illegible]	[illegible]
Cowra ..	[illegible]	[illegible]	[illegible]	[illegible]
Grafton ..	[illegible]	[illegible]	[illegible]	[illegible]
Gunnedah	b	72	47	0
Hay	b	79	35	0
Hill End	b	—	—	0
Inverell ..	b	71	30	0
Kiandra ..	n	51	20	0
Lismore ..	u	76	57	0
Maitland ..	c	78	43	0
Marsdens	b	68	42	0
Menindie	b	63	43	0
Molong ..	b	77	39	0
Moree	b	91	51	0
Moruya ..	b	62	37	0
Moss Vale	b	58	34	0
M. Victoria	g	65	34	0
Mudgee ..	b	83	33	0
Murrumbh	b	69	35	0
Murr'r'ndi	b	74	38	0
Mus'lbrook	b	73	34	0
Narrabri ..	b	82	41	0
Newcastle	c	62	50	0
Nowra	b	64	42	0
Orange ..	b	56	33	0
Paton	c	62	39	0
P. M'quarie	c	65	49	0·05
Port Stephens	b	80	48	0
Queanbeyan	b	64	34	0
Quirindi ..	b	81	39	0
Singleton	b	80	41	0
SYDNEY ..	b	60	46	0
Tamworth	b	74	38	0
Taralga ..	b	71	39	0
Taree	c	67	50	0
Tent'rfield	b	75	38	0
Wagga	b	68	31	0
Walcha ..	o	63	33	0
Walgett ..	b	70	45	0
Wentw'rth	b	65	37	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	65	48	0
Young ..	b	86	34	0

Average Annual Rainfall for 26 years

FINE GENERALLY

H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

[illegible] of the weather at 9 a.m., b [illegible] means fine weather; [illegible] cloudy [illegible] Next to [illegible] is moving per hour; [illegible] showing the [illegible] denoting the shade temperature at 9 a.m. The barometer [illegible] state of barometers round the coast from Perth to Cooktown [illegible] Perth; Ac. [illegible]; Ea. Eucla; Cb. Cape Borda; A. Adelaide; Ro. Robe; P. Portland; M. [illegible] V.P. Wilson's Promontory; Go. Gabo; E. Eden; Mo. Moruya; [illegible] Wollongong; S. Sydney; N. Newcastle; P.M. Port Macquarie; C. Clarence River; [illegible] Rockhampton; Ck. Cooktown; [illegible] Menindie; Mt. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, [illegible] Alice Springs. The [illegible] curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine, with scattered clouds; dull in places between Carrieton and Tennant's Creek. Winds generally fresh and variable in direction from S.E. to N.E. and N.; moderate sea, falling barometers, and light N.E. winds on coast; S.E. winds and calm in Northern Territory and Central Australia. Rainfall: Eucla, 0·11; Streaky Bay, 0·01; Macdonnell Bay, 0·01.

Victoria.—Cloudy on coast, with light variable winds, moderate [illegible] and steady barometers; fine and clear, with light S.S.W. [illegible] Echuca, and calm at Omeo. Rainfall: Melbourne, 0·04; [illegible] Otway, 0·02; Wilson's Promontory, 0·01.

Tasmania.—Fine and clear on N. coast, with light S.S.E. wind.

New Zealand.—Russell, barometer 29·80, wind S.W., fine and clear; Wellington, barometer 29·80, fine and clear; Bluff, barometer 29·60, wind N.W., dull.

New South Wales.—Generally fine and clear, with light variable [illegible] and calms, and rising barometers; smooth sea, fresh S.W. [illegible], rising barometers, and scattered clouds in places on coast. [illegible] see map above.)

[illegible] and.—Fine and clear on E. coast, with S.E. winds and [illegible] sea.

3 P.M. OBSERVATIONS.

[illegible] South Wales.—Albury, S.W., fine, temperature 69°; Cape [illegible], N., 14, fine, moderate sea, temperature 62°; Clarence River, S.E., fine, moderate sea, temperature 65°; Deniliquin, calm, fine, temperature 61°; Dubbo, calm, fine, temperature 68°; Eden, E., 14, fine, slight sea, temperature 55°; Goulburn, calm, fine, temperature 57°; Menindie, S.W., 11, fine, temperature 62°; Moruya, S.E., 28, fine, smooth sea, temperature 69°; Newcastle, S., moderate, fine, moderate sea, temperature 62°; Port Macquarie, S.E., 14, cloudy, smooth sea, temperature 68°; Sydney, E., 8, fine, smooth sea, temperature 61°; Wentworth, calm, fine, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 10 inches above summer level; at Hay, 5 feet 7 inches above summer level; at Balranald, 8 feet 9 inches above summer level. Murray: At Albury, 2 feet 7 inches above summer level; at Euston, 9 feet 3 inches above summer level. Darling: At Wentworth, 7 feet 3 inches above summer level; at Pooncarie, 1 foot 1 inch above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 8.

Sun rises at 6.11, sets at 5.45; Moon, 5.36 a.m., 4.50 p.m.; Mercury, 5.32 a.m., 4.58 p.m.; Venus, 7.41 a.m., 8.20 p.m.; Mars, 3.37 a.m., 1.36 p.m.; Jupiter, 6.27 a.m., 5.18 p.m.; Saturn, 2.19 a.m., 12.15 p.m. New moon, 8th; full moon, 24th.

High water at Port [illegible] p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 8, 18[illegible]

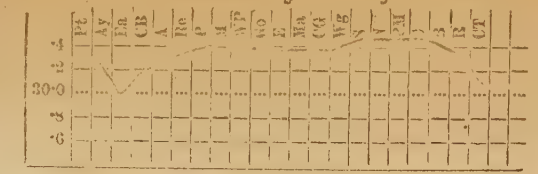
Stations		Mx	Mn	Rain
Albury ..	b	72	38	0
Armidale	b	58	35	0
Balranald	c	85	36	0
Bathurst..	b	70	34	0
Bend'meer	b	65	33	0
Bodalla ..	b	69	38	0
Bourke ..	b	84	53	0
Camd'n H.	b	66	—	0
C. St. Geo.	—	—	—	—
Carcoar ..	b	58	45	0
Casino	b	73	43	0
Cassilis ..	o	6[illegible]	45	0
Clarence ..	c	76	31	0
Condob'lin	b	57	36	0
Cooma	c	72	25	0
Coonab'n.	b	74	29	0
Coonamble	b	—	—	0
Cowra	b	65	33	0
Deniliquin	b	76	[illegible]	0
Dubbo ..	b	75	41	0
Eden	c	58	44	0
Euston ..	c	78	37	0
Forbes....	b	7[illegible]	28	0
Glen Innes	b	70	31	0
Goulburn	b	70	33	0
Grafton ..	u	81	47	0
[illegible]		28	61	
[illegible]nnedah	b	71	4[illegible]	0
[illegible]	b	[illegible]	[illegible]	0
[illegible]end	[illegible]	—	—	0
[illegible]ell .	b	[illegible]	[illegible]	0
[illegible]dra .	[illegible]	[illegible]	[illegible]	0
[illegible]re .	[illegible]	7[illegible]	6[illegible]	0·01
[illegible]amand..	b	79	44	0
Marsdens	b	71	45	0
Menindie	u	68	47	0
[illegible] ..	b	73	10	0
[illegible]	b	[illegible]	49	0
[illegible]	—	—	—	—
[illegible]ce	b	59	43	0
[illegible]ria	b	65	[illegible]	0
Mudgee ..	b	[illegible]	31	0
[illegible]	—	—	—	—
[illegible]	b	65	39	0
[illegible]	b	74	47	0
[illegible]	b	[illegible]	5	0
[illegible]e	g	62	53	0
[illegible]	b	67	13	0
[illegible] ..	b	57	33	0
[illegible]	o	62	42	0
[illegible]e	b	69	46	0
[illegible]h	g	76	46	0
[illegible]van	b	59	39	0
[illegible]li ..	b	81	[illegible]	0
[illegible]on	b	67	51	0
[illegible]ey ..	g	64	[illegible]	0
[illegible]orth	b	67	44	0
[illegible] ..	f	76	42	0
[illegible]	b	70	52	0
[illegible]eld	c	68	—	0
[illegible]	b	70	—	0
[illegible] ..	b	57	3[illegible]	0
[illegible] ..	b	72	40	0
Went'w'rth	g	71	45	0
[illegible]nia	b	—	—	0
Wollongong	b	51	4[illegible]	0
Young ..	b	82	3[illegible]	0

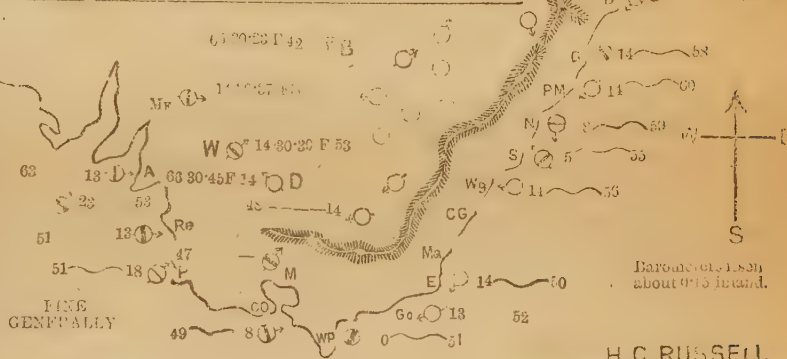
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·363
Total Rainfall from January 1st to September 8 ..32·9[illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E. — T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow.
Smooth sea. Heavy sea. Very heavy sea.





NOTES EXPLANATORY OF MAP.

[illegible] shows the state of the weather at 9 a.m., b [illegible] drizzling rain; f, fog; g, gloomy; h, hazy; [illegible]; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible] Mx gives the maximum temperature for previous 24 [illegible] minimum temperature; rn the rain for the previous 24 [illegible] used in the map are explained on the marg n. At each coast station [illegible] Each cane pointing to the direction from which the wind is [illegible] means fine weather; a circle with bar, cloudy [illegible] black spot, raining. No[illegible] to this symbol are placed figures denoting [illegible] the wind [illegible] moving per hour; next, a symbol showing the state [illegible] figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W, Wilson's Promontory; Ge, Gabo; E, Eden; Ma, Moruya; CG, Jervis [illegible] Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

[illegible]ustralia.—Fine and calm at Albany; dull at Esperance [illegible] strong S. wind; rainfall, 0·22.

[illegible] Australia reports weather generally dull inland to [illegible] Waters, fine in Northern Territory, winds generally [illegible] variable in direction from S.E. to N.E. and N.; mode[illegible]ing barometers, and light easterly winds on coast; [illegible]aky Bay, 0·01; C. Borda, 0·09.

[illegible] Generally cloudy on coast, with light N.E. winds, [illegible] sea, and steady barometers; fine inland at Omeo, and fine [illegible] at Echuca; rainfall Lake Entrance, 0·01.

[illegible]ia.—Dull on N. Coast, with light N.E. wind. No [illegible]

[illegible]nd.—Russell, barometer 30·00, wind S.W., fine; [illegible], barometer 29·70, wind S.E., fine; Bluff, barometer [illegible] S.W. gale, with heavy showers.

[illegible]th Wales.—Generally fine and clear, with light variable [illegible]d calms, and steady barometers; scattered clouds and [illegible]es on coast, with light S.W. winds and smooth sea. [illegible] be found in weather map above.)

[illegible]nd.—Cloudy and dull on east coast, with S.E. and [illegible] and moderate sea. Townsville reports sea rather [illegible] No rain.

3 P.M. OBSERVATIONS.

[illegible]ria.—Melbourne, S.W., 13, cloudy, temperature 57°; Cape [illegible], 8, cloudy, misty, slight sea, temperature 55°; Portland, E.S.E., 13, fine but cloudy, slight sea, temperature 55°; Wilson's Promontory, N.E., 18, dull, slight sea, temperature 53°.

New South Wales.—Albury, W., 14, fine, temperature 64°; Cape St. George, N.E., 23, fine, smooth sea, temperature 65°; Clarence River, S., 14, fine, smooth sea, temperature 69°; Deniliquin, calm, fine, temperature 70°; Dubbo, calm, fine, temperature 67°; Eden, N.E., 14, fine, slight sea, temperature 60°; Goulburn, calm, fine, temperature 58°; Moruya, N.E., 28, fine, smooth sea, temperature 63°; Newcastle, S.E., 8, fine, smooth sea, temperature 63°; Port Macquarie, S.E., 14, fine, smooth sea, temperature 71°; Sydney, N.E., 8, fine, smooth sea, temperature 62°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 9 inches above summer level; at Hay, 5 feet 4 inches above summer level; at Balranald, 9 feet above summer level. Murray: At Albury, 2 feet above summer level; at Euston, 9 feet 6 inches above summer level. Darling: At Wentworth, 7 feet 7 inches above summer level; at Pooncarie, 1 foot 1 inch above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 9.

Sun rises at 6.10, sets at 5.46; Moon, 6.18 a.m., 5.56 p.m.; Mercury, 5.29 a.m., 4.53 p.m.; Venus, 7.40 a.m., 8.22 p.m.; Mars, 3.36 a.m., 1.35 p.m.; Jupiter, 6.30 a.m., 5.44 p.m.; Saturn, 2.16 a.m., 12.12 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 9.—5.22 a.m., 5.14 p.m.

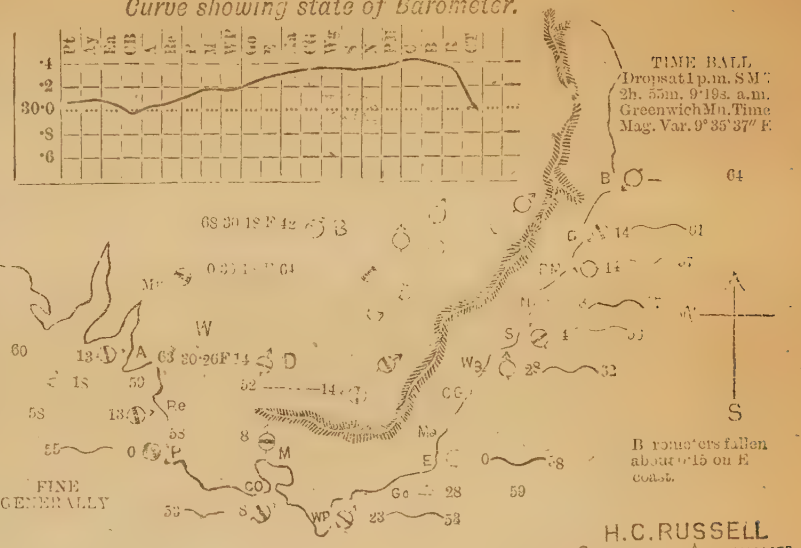
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 9, 1

Stations		Max	Min	Rain
Albury	u	75	27	0
Armidale	b	65	39	0
Balranald	g	84	51	0
Bathurst	c	73	37	0
Bend'ineer	c	67	32	0
Bodalla	b	71	39	0
Bourke	c	87	61	0
Camd'n H.	b	68	39	0
C. St. Geo.	—	—	—	—
Carcoar	b	60	46	0
Casino	b	78	42	0
Cassilis	b	64	42	0
Clarence	c	76	58	0
Condob'lin	u	59	43	0
Cooma	c	73	31	0
Coonab'n.	g	76	34	0
Coonamble	c	—	—	0
Cowra	b	64	54	0
Deniliquin	u	80	46	0
Dubbo	g	81	51	0
Eden	b	60	58	0
Euston	u	85	53	0
Forbes	u	75	43	0
Glen Innes	b	73	33	0
Goulburn	f	7[illegible]	43	0
Grafton	c	81	57	0
Gunnedah	c	74	48	0
Hay	u	81	55	0
Kiri End	b	—	—	0
Inverell	b	67	41	0
Kiandra	g	60	30	0
Lismore	—	—	—	—
Maitland	b	76	48	0
Marsdens	p	76	57	0
Menindie	u	77	52	0
Molong	b	71	36	0
Moree	b	84	51	0
Moruya	c	67	46	0
Moss Vale	c	61	42	0
M. Victoria	—	—	—	—
Mudgee	b	84	36	0
Murrumbh	c	73	37	0
Murr'r'ndi	o	65	38	0
Mus'lbrook	c	74	38	0
Narrabri	b	86	43	0
Newcastle	c	64	50	0
Nowra	b	71	45	0
Orange	c	59	39	0
Picton	c	67	40	0
P.M'quarie	b	68	45	0
P.Stephens	b	79	50	0
Qu'nbeyan	g	63	46	0
Quirindi	b	83	45	0
Singleton	b	69	41	0
SYDNEY	b	65	49	0
Tamworth	b	70	43	0
Taralga	c	73	39	0
Taree	b	72	45	0
T'nt'rfield	c	68	41	0
Wagga	u	60	47	6
Walcha	f	65	33	0
Walgett	b	77	53	0
Wentw'rth	—	—	—	—
Wilcannia	u	—	—	0
Woll'ngng	c	72	53	0
Young	u	83	46	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·763
Total Rainfall from January 1st to September 9 ..32·830
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, Cloudy; wind; wind; T. storm, Rain; wind S., wind; If it is cloudy, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed w.t. gives the state of the weather at 9 a.m., b. fair; c, cloudy; d, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; k, misty; m, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening; w, lowering. Max gives the corresponding maximum temperature for previous 24 hours. Min gives the corresponding minimum temperature; rain the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mt. Inland the state of barometers is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Adelaide Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light N.E. and N.W. winds, and smooth sea.

South Australia reports weather dull inland to Beltana, with fresh N.E. to N.W. winds, smooth sea, light northerly winds and falling barometers on S. coast; scattered clouds and S.E. and N.E. winds in Northern Territory; rainfall, Port Augusta, 0·01; Eucla, 0·01; Streaky Bay, 0·04; C. Borda, 0·05.

Victoria.—Generally cloudy and unsettled; light northerly winds, falling barometers, and moderate sea on coast: calm, with light rain, at Portland; foggy at Cape Otway and Melbourne.

Tasmania.—Cloudy on N. Coast, with light S.E. wind; rainfall Low Heads, 0·01.

New Zealand.—Russell, barometer 30·00, wind S.W., showery; Wellington, barometer 30·00, wind S.E.; Bluff, barometer 30·00, wind S.W.; Gisborne, barometer 29·80, S.W. gale, rough sea.

New South Wales.—Generally fine and clear, with light variable winds and calms, scattered clouds in places. (See weather map). Smooth sea, falling barometers and light S.W. and N.W. winds on coast.

Queensland.—Cloudy and unsettled, with S.W. to S.E. winds and moderate sea. Rainfall—Brisbane, 0·04; Cape Moreton, 0·07; Cooktown, 0·40, and still falling in heavy showers.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers falling, N.E., 12, cloudy, temperature 62°; Cape Otway, E.N.E., 6, foggy, smooth sea, temperature 57°; Portland, calm, cloudy, smooth sea, temperature 59°; Wilson's Promontory, N.N.E., 24, overcast, smooth sea, temperature 56°.

New South Wales.—Albury, W., showery, temperature 58°; Cape St. George, N.E., 56, fine, smooth sea, temperature 64°; Clarence River, S.E., 14, fine, smooth sea, temperature 70°; Deniliquin, NN.E., 28, fine, temperature 72°; Dubbo, W.N.W., 14, fine, temperature 70°; Eden, N.E., 14, fine, slight sea, temperature 63°; Goulburn, calm, fine, temperature 60°; Moruya, N.E., 28, gloomy, smooth sea, temperature 63°; Newcastle, N.E., 14, fine, smooth sea, temperature 66°; Port Macquarie, N.E., 12, fine, smooth sea, temperature 72°; Sydney, N.E., 8, scattered clouds, smooth sea, temperature 64°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 9 inches above summer level; at Hay, 5 feet 3 inches above summer level; at Balranald, 9 feet 6 inches above summer level. Murray: At Albury, 2 feet 6 inches above summer level; at Euston, 9 feet 9 inches above summer level. Darling: At Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 10.

Sun rises at 6.8, sets at 5.16; Moon, 6.57 a.m., 7.1 p.m.; Mercury, 5.26 a.m., 4.48 p.m.; Venus, 7.39 a.m., 8.24 p.m.; Mars, 3.34 a.m., 1.34 p.m.; Jupiter, 6.33 a.m., 5.41 p.m.; Saturn, 2.12 a.m., 12.8 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 10.—9.4 a.m., 9.24 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 10, 1885

Stations.		Max.	Min.	Rain.
Albury	u	57	51	1.10
Armidale	b	[illegible]	[illegible]	0
Balranald	b	87	48	0·01
Bathurst	u	71	44	0
Bend'meer	g	71	35	0
Bodalla	g	75	39	0·02
Bourke	g	90	61	0
Camd'n P.	b	69	55	0
C. St. Geo.	c	—	—	0
Carcoar	g	72	51	0
Casino	b	83	42	0
Cassilis	g	65	45	0
Clarence	c	73	54	0
Condobolin	u	69	45	0
Cooma	c	73	[illegible]	[illegible]
Cootamundra	g	71	43	0
Coonamble	c	—	—	0
Cowra	c	54	34	0
Deniliquin	c	65	34	0·07
Dubbo	g	69	50	0
Eden	p	65	57	0
Euston	b	83	5[illegible]	[illegible]
Forbes	[illegible]	[illegible]	[illegible]	0
Glen Innes	b	79	36	0
Goulburn	g	[illegible]	[illegible]	0
Grafton	b	84	46	0
Gunnedah	c	7[illegible]	48	0
Hay	u	71	[illegible]	0·17
Hill End	c	—	—	0
Inverell	b	[illegible]	[illegible]	0
Kiandra	d	[illegible]	[illegible]	0·[illegible]
Lismore	b	[illegible]	[illegible]	0
Maitland	g	7[illegible]	[illegible]	0
Marsden	g	[illegible]	[illegible]	[illegible]
Menindie	b	7[illegible]	[illegible]	0
Molong	g	[illegible]	[illegible]	0
Moree	b	[illegible]	[illegible]	0
Moruya	g	[illegible]	[illegible]	[illegible]
Moss Vale	d	[illegible]	[illegible]	0
M. Victoria	[illegible]	65	47	0
Mudgee	[illegible]	[illegible]	43	0
Murrumb'ge	g	[illegible]	[illegible]	[illegible]
Murrurundi	g	[illegible]	[illegible]	0
Mu'broodi	g	74	57	0
Narrabri	b	90	48	[illegible]
Newcastle	g	66	55	0
Nowra	g	71	54	0
Orange	g	62	45	0
Picton	o	70	44	0
P. M'quarie	b	71	48	0
P. Stephens	c	75	49	0
Qu'nbeyan	u	61	48	0·05
Quirindi	g	80	52	0
Singleton	u	72	51	0
SYDNEY	g	67	56	0
Tamworth	c	69	42	0
Taralga	g	69	45	0
Taree	g	75	47	0
Tu'rfield	c	73	43	0
Wagga	r	61	51	0·35
Walcha	b	67	35	0
Walgett	c	78	57	0
Wentw'rth	b	80	52	0
Wilcannia	u	—	—	0
Woll'ngong	g	72	54	0
Young	p	73	50	0·12

SYDNEY OBSERVATORY

Latitude [illegible] Longitude [illegible] E.

Average Annual Rainfall for 26 years [illegible]

Average for 27 years from Jan. 1st to Aug. 31st [illegible]

Total Rainfall from January 1st to 31st [illegible]

Bar [illegible] reduced to 32° [illegible]

Curve showing state of Barometer

Greenwich Mn. Time

Mag. Var. 9° 37′ 37″ E

C. OTTY

GENERALLY

H. C. RUSSELL.

Government Astronomer.

[illegible] at 9 a.m., [illegible] hazy; [illegible] the previous [illegible] direction from which the wind is [illegible] weather, a gale with bar. cloudy [illegible] Portland; [illegible] Promontory; [illegible] Sydney; N. New South Wales; P. M. P. Y. quarter; C. Clarence [illegible] Inland the state of [illegible] Albury, Bendemeer, Wentworth, Bourke, and Wilcannia [illegible] a pause to [illegible] passing along eastward; [illegible] winds [illegible]

Western Australia.—Cloudy generally, showery on S. coast and on W. coast as far N. as Perth; winds light and variable; sea smooth (rough at Carnarvon). Rainfall: Carnarvon, 0·04; Geraldton, 0·28; Albany, 0·96; Esperance Bay, 0·07.

South Australia. Generally fine; fine but cloudy on coast, in parts, and in S.E.; scattered clouds between Eyre's Peninsula and Port Darwin; wind fresh from S.E. and N.E., thunderstorm in S.E. in night with rain, heavy at Port Darwin, 0·57; Mount Gambier and 0·55 at Kingston. Rainfall: Port Darwin, 0·04; C. Borda, 0·02; Robe, 0·21.

Victoria.—Cloudy generally, showery in S.E., smooth sea, falling barometers, and light S.W. winds except in Echuca with fresh N. wind. Rainfall: Melbourne, 0·14; Portland, 0·25; Echuca, 0·45; C. Otway, 0·32; Wilson's, 0·12; Lake Entrance, 0·08; Omeo, 0·30.

Tasmania.—Light rain falling on N. Coast, with light E.N.E. wind. Rainfall: Low Head, 0·04.

New Zealand.—Russell, barometer 30·20, wind S.W., light; Wellington, barometer 30·30, wind N.E., light; Greymouth, S.W., strong; sea rough.

New South Wales.—General [illegible] and settled. (Details in map.) Light rains recorded in [illegible] Cowra at 1·17 at Albury. Smooth sea, falling barometers, light N.W. and S.W. winds, and fine but cloudy weather on coast [illegible] Rainfall, 0·16; thunderstorm weather.

Queensland. Dull north of [illegible] Rainfall at Cooktown and Rockhampton, the [illegible] being 0·35 and 0·05 respectively. S.E. and S.W. winds and moderate sea prevail.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers steady, N., 12, cloudy, temperature 70°; Cape Otway, W.N.W., 6, cloudy, smooth sea, temperature 64°; Portland, N.W., 18, cloudy, smooth sea, temperature 64°; Wilson's Promontory, N.N.E., 18, cloudy, smooth sea, temperature 59°.

New South Wales.—Albury, calm, dull, temperature [illegible]; Cape St. George, N., 28, cloudy, smooth sea, temperature 63°; Clarence River, E., 14, fine, smooth sea, temperature 71°; Goulburn, N.W., dull, temperature 61°; Dubbo, W., 14, cloudy, temperature 65°; Eden, N., 14, fine, slight sea, temperature 65°; Deniliquin, N.W., fine temperature 75°; Moruya, N.N.W., [illegible] sea, temperature 72°; Newcastle, E., 8, cloudy, smooth sea, temperature 67°; Port Macquarie, N.N.E., 42, [illegible] smooth sea, temperature 71°; Sydney, N., 8, dull, smooth sea, temperature 67°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet above summer level; at Hay, 5 feet 3 inches above summer level; at Balranald, 9 feet above summer level. Murray: At Albury, 2 feet 6 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 7 feet 11 inches above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 11.

Sun rises at 6.7, sets at 5.47; Moon, 7.37 a.m., 8.3 p.m.; Mercury, 5.23 a.m., 4.14 p.m.; Venus, 7.38 a.m., 7.26 p.m., Mars, 8.33 a.m., 1.32 p.m.; Jupiter, 6.36 a.m., 5.37 p.m.; Saturn, 2.9 a.m., 12.5 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 11, 9.44 a.m., 10.3 p.m.

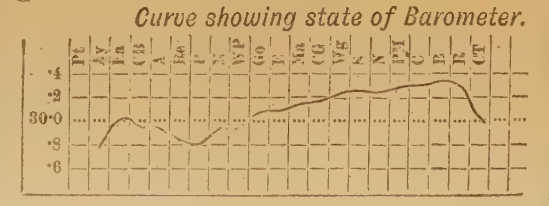
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 11, 1885

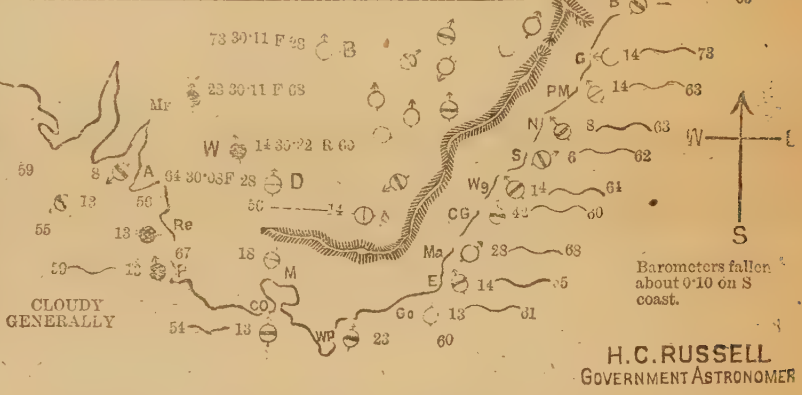
Stations	W.T.	Mx	Mn	R'in
Albury ..	g	67	52	0·04
Armidale	b	72	44	0
Balranald	u	88	57	0
Bathurst..	u	67	50	0
Bend'neer	b	72	39	0
Bodalla ..	b	78	43	0
Bourke ..	c	88	58	0
Camd'n H.	e	71	59	0
C. St. Geo.	c	66	52	0
Carcoar ..	u	64	57	0
Casino	b	82	42	0
Cassilis ..	b	65	51	0
Clarence ..	o	79	56	0
Condob'lin	b	69	47	0
Cooma	b	68	34	0·02
Coonab'n.	b	70	39	0·01
Coonamble	c	—	—	0
Cowra	c	66	51	0
Deniliquin	g	80	50	0
Dubbo ..	b	75	55	0
Eden	u	65	48	0·02
Euston ..	r	83	56	0
Forbes....	b	74	50	0
Glen Innes	b	78	39	0
Goulburn	g	70	39	0
Grafton ..	b	85	49	0
Gunnedah	c	77	51	0
Hay	u	79	54	0·03
Kut End	b	—	—	0
Inverell ..	b	68	40	0
Kiandra ..	b	—	—	0
Lismore ..	b	78	50	0
Maitland..	g	77	58	0
Marsdens	b	69	56	0
Menindie	p	86	61	0
Molong ..	o	64	56	0
Moree	g	80	54	0
Moruya ..	c	74	54	0
Moss Vale	u	64	49	0
M. Victoria	u	62	50	0
Mudgee ..	u	84	44	0
Murrumbh	c	66	51	0
Murr'r'ndi	g	65	47	0
Mus'lbrook	c	76	52	0
Narrabri ..	b	88	41	0
Newcastle	c	65	58	0
Nowra	—	—	—	—
Orange ..	g	62	48	0
Picton	u	66	47	0
P.M'quarie	c	63	52	0
P.Stephens	g	73	46	0
Qu'nbeyan	g	59	46	0·02
Quirindi ..	c	71	51	0
Singleton	b	75	56	0
SYDNEY ..	u	69	61	0·02
Tamworth	b	72	45	0
Taralga ..	g	63	47	0
Taree	c	78	47	0
T'nt'rfield	b	74	37	0
Wagga....	c	64	51	0·02
Walcha ..	b	69	40	0
Walgett ..	u	82	60	0
Wentw'rth	r	83	52	0·22
Wilcannia	c	—	—	0
Woll'ng'ng	g	70	62	0
Young ..	b	68	49	0·01

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 11..32·850
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy wind E.
T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.





H. C. RUSSELL.
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.; b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy and showery, southerly winds on W. coast, and westerly winds on S.; sea moderate. Rainfall: Geraldton, 0·14; Albany, 0·08; Esperance Bay, 0·28.

South Australia reports weather generally dull and raining inland to Barrow Creek, sky half clouded west of Cape Borda; winds N.W. to S.W., light; thunder showers during night extending inland to Peake, heaviest over Mount Lofty Ranges; average, 0·40 to 0·60"; Watervale, 1·20; Adelaide, 0·35; Robe, 0·28; M'Donnell Bay, 0·05; Port Darwin, 0·30; Peake, 0·05; Farina, 0·15; Port Augusta, 0·26; Streaky Bay, 0·10; and Cape Borda, 0·28.

Victoria.—Cloudy generally, smooth sea, falling barometers, and light northerly winds on coast, fine but cloudy inland. Rainfall: Portland, 0·07; Omeo, 0·18.

Tasmania.—Cloudy on N. coast, with E.N.E. breeze. Rainfall: Low Heads, 0·14.

New Zealand.—Russell, barometer 30·30, wind S.E., generally fine and clear; Wellington, barometer 30·40, wind S.E., generally fine and clear; Bluff, barometer 29·30, wind S., generally fine and clear.

New South Wales.—Generally cloudy and unsettled. (Details will be found in map above.) Smooth sea, falling barometers and light N.W. winds on coast; N.W. and W. winds and calms inland.

Queensland.—Cloudy on E. coast, sea moderate; winds S.E. Rainfall: Rockhampton, 0·02; Cape Moreton, 0·03.

3 P.M. OBSERVATIONS.

Victoria.—Barometers steady. Melbourne, N., 12, showery, temperature 62°; Cape Otway, N., 6, threatening in west, smooth sea, temperature 64°; Portland, W., 24, showery, smooth sea, temperature 57°; Wilson's Promontory, N.N.E., 24, squally, with rain, smooth sea, temperature 64°.

New South Wales.—Cape St. George, N., 56, cloudy, smooth sea, temperature 70°; Clarence River, N.E., 28, fine, smooth sea, temperature 70°; Deniliquin, N., dull, temperature 60°; Dubbo, N.N.W., 8, fine, temperature 71°; Eden, N., 28, fine, slight sea, temperature 70°; Goulburn, N.W., 14, fine, temperature 62°; Moruya, N.E., 38, moderate sea, temperature 66°; Newcastle, E., 8, fine, smooth sea, temperature 68°; Port Macquarie, N.E., 42, hazy, smooth sea, temperature 72°; Sydney, N., 8, dull, smooth sea, temperature 71°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 2 inches above summer level; at Hay, 5 feet 3 inches above summer level; at Balranald, 9 feet above summer level. Murray: At Albury, 2 feet 11 inches above summer level; at Euston, 9 feet 10 inches above summer level. Darling: At Wentworth, 8 feet above summer level; at Pooncarie, 11 inches above summer several; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 12.

Sun rises at 6.5, sets at 5.48; Moon, 8.16 a.m., 9.4 p.m.; Mercury, 5.20 a.m., 4.39 p.m.; Venus, 7.37 a.m., 8.28 p.m.; Mars, 3.31 a.m., 1.31 p.m.; Jupiter, 5.39 a.m., 5.33 p.m.; Saturn, 2.5 a.m., 12.1 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 12: 10.22 a.m., 10.40 p.m

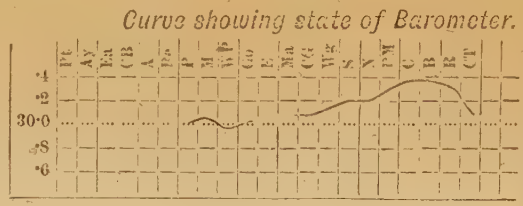
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 12, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	u	65	35	0·75
Armidale	b	73	43	0
Balranald	p	66	49	0·79
Bathurst..	g	77	52	0
Bend'meer	b	74	35	0
Bodalla ..	b	78	43	0
Bourke ..	c	89	64	0
Camd'n H.	b	78	60	0
C. St. Geo.	g	72	60	0
Carcoar ..	g	65	56	0
Casino	–	—	—	—
Cassilis ..	g	72	49	0
Clarence ..	b	83	58	0
Condob'lin	u	66	50	0
Cooma....	c	75	48	0
Coonab'n.	c	79	39	0
Coonamble	p	—	—	0
Cowra	b	70	63	0
Deniliquin	c	71	51	0·58
Dubbo ..	b	83	31	0
Eden	u	69	53	0
Euston ..	u	70	54	0·93
Forbes....	b	83	60	0
Glen Innes	b	77	42	0
Goulburn	b	77	52	0
Grafton ..	b	90	51	0
Gunnedah	b	76	51	0
Hay	u	76	34	0·20
Hill End	b	—	—	0
Inverell ..	b	69	41	0
Kiandra ..	c	57	45	0·17
Lismore ..	c	79	52	0
Maitland..	c	73	50	0
Marsdens	c	78	61	0
Menindie	p	70	59	0·24
Molong ..	o	73	54	0
Moree	b	83	56	0
Moruya ..	g	73	59	0
Moss Vale	g	67	54	0
M. Victoria	c	70	50	0
Mudgee ..	b	82	41	0
Murrumbh'	–	—	—	—
Murr'r'ndi	b	72	48	0
Mus'lbrook	g	85	48	0
Narrabri ..	c	92	54	0
Newcastle	c	76	55	0
Nowra	–	—	—	—
Orange ..	g	69	50	0
Picton	g	69	51	0
P.M'quarie	b	65	54	0
P.Stephens	b	76	57	0
Qu'nbeyan	g	68	48	0
Quirindi ..	b	79	50	0
Singleton	p	80	53	0
SYDNEY ..	g	74	60	0
Tamworth	b	76	44	0
Taralga ..	b	71	50	0
Taree	b	80	51	0
T'nt'rfield	–	—	—	—
Wagga....	u	68	54	0·11
Walcha ..	–	—	—	—
Walgett ..	b	82	58	0
Wentw'rth	–	—	—	—
Wilcannia	b	—	—	0
Woll'ng'ng	u	70	61	0
Young ..	g	82	51	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.. LONGITUDE 10h. 4m. 56·1s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·548
Total Rainfall from January 1st to September 12, 32·850
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy wind E. T. storm, wind S. Rain, wind W. If it is calm, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.



H.C.RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; z, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature, and the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; notice the winds preceding them, and southerly following.

South Australia.—Generally fine south of Port Wakefield, cloudy in places northwards.

Victoria.—Cloudy and dull with light N.W. and W. winds and calms; smooth sea and steady barometers on coast. Showery in early morning at Wilson's Promontory. Lakes Entrance reports slight shock of earthquake at 7.11 p.m. on 11th instant. Rainfall: Melbourne, 0·04; Portland, 0·09; Cape Otway, 0·37; Wilson's Promontory, 0·46; Lakes Entrance, 0·03; Omeo, 0·27.

Tasmania.—Cloudy and dull on N. coast, with light N.N.W. wind. Rainfall: Low Heads, 0·28.

New Zealand.—Russell, barometer 30·40, wind calm, generally fine; Wellington, barometer 30·50, wind S.E., generally fine; Bluff, barometer 30·50, wind N.E., generally fine.

New South Wales.—Generally cloudy and unsettled. Smooth sea, falling barometers and light northerly winds on coast; calm inland. Rain in S.W., heaviest being 0·93 at Euston, 0·79 at Balranald, and 0·75 at Albury. (Details of weather, &c., will be be found in map above.) Gabo Island reports a heavy shock of earthquake at 7.30 p.m. on 11th, lasting two minutes, and passing from S. to N. Too late for map:—Tenterfield, N.E., 76, temperature 56°, fine; Casino, calm, 88, temperature 42°, fine.

Queensland.—Cloudy on E. coast, fine at Brisbane; passing showers falling at Cooktown. Winds generally S.E. to S.W.; sea moderate. Rainfall, 0·08; Rockhampton, 0·04; Cooktown, 0·03.

3 P.M. OBSERVATIONS.

New South Wales. Albury, calm, cloudy, temperature 62°; Cape St. George, N.E., 28, fine, smooth sea, temperature 75°; Clarence River, N.E., 20, fine, smooth sea, temperature 72°; Deniliquin, N., 14, cloudy, temperature 65°; Dubbo, N.E., 20, fine; Eden, N.E., 28, cloudy, smooth sea, temperature 68°; Goulburn, N.W., 10, fine, temperature 67°; Menindie, N.E., 28, cloudy, temperature 66°; Moruya, N.W., 14, cloudy, moderate sea, temperature 78°; Newcastle, E., 10, fine, smooth sea, temperature 72°; Port Macquarie, N.N.E., 30, fine, moderate sea, temperature 72°; Sydney, N.E., 20, cloudy, smooth sea, temperature 73°; Wentworth, calm, cloudy, sultry.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 3 inches above summer level; at Hay, 5 feet above summer level; at Balranald, 9 feet 3 inches above summer level. Murray: At Albury, 4 feet 1 inch above summer level; at Euston, 9 feet 11 inches above summer level. Darling: At Pooncarie, 8 inches above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

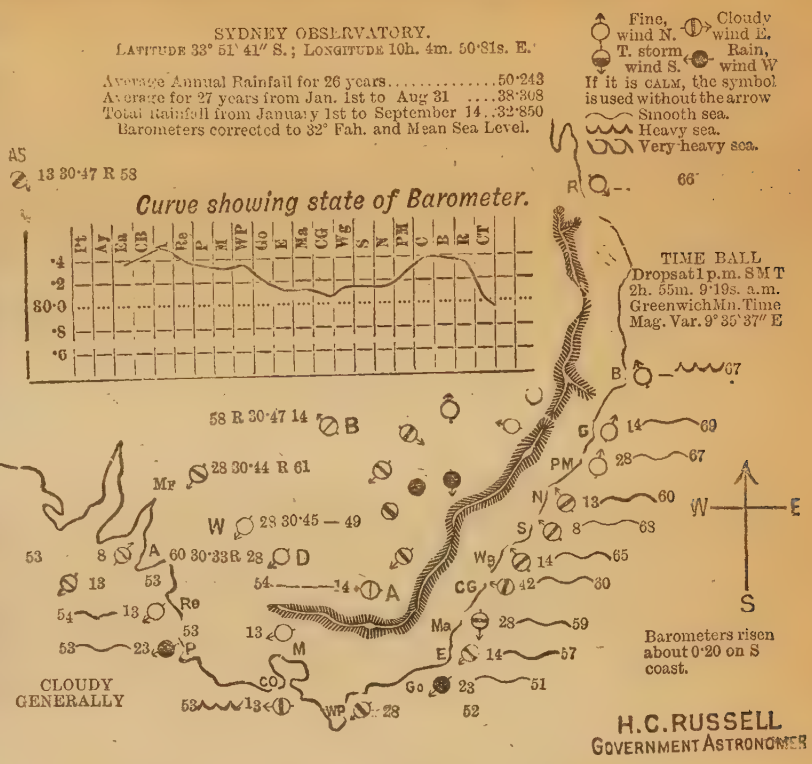
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 14.

Sun rises at 6.2, sets at 5.49; Moon, 9.37 a.m., 10.59 p.m.; Mercury, 5.14 a.m., 4.30 p.m.; Venus, 7.35 a.m., 8.31 p.m.; Mars, 3.28 a.m., 1.28 p.m.; Jupiter, 5.14 a.m., 5.26 p.m.; Saturn, 1.58 a.m., 11.54 p.m. New moon, 5th; full moon, 24th.

High water at Fort Denison, September 14: 11.38 a.m., 11.58 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 14, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	c	66	53	2·06
Armidale	b	74	48	0
Balranald	b	72	38	0·91
Bathurst..	g	71	52	0·58
Bend'meer	g	74	45	0
Bodalla ..	g	84	56	0
Bourke ..	d	79	60	0·85
Camd'n H.	c	74	61	0
C. St. Geo.	g	74	57	0
Carcoar ..	g	65	58	0·83
Casino	b	84	45	0
Cassilis ..	g	73	62	0
Clarence ..	b	80	59	0
Condob'lin	u	58	45	0·65
Cooma	g	69	49	0·01
Coonab'n.	g	80	56	0
Coonamble	u	—	—	0
Cowra	r	72	63	0·99
Deniliquin	b	69	42	1·34
Dubbo ..	p	74	57	0·24
Eden	u	59	52	0·19
Euston ..	b	78	42	0·70
Forbes....	p	71	55	0·85
Glen Innes	b	79	43	0
Goulburn	g	63	51	0·04
Grafton ..	b	87	57	0
Gunnedah	g	81	58	0
Hay	b	68	49	0·97
Hill End	r	—	—	0·40
Inverell ..	u	71	43	0
Kiandra ..	-	—	—	—
Lismore ..	-	—	—	—
Maitland..	g	79	58	0
Marsdens	u	68	59	0·67
Menindie	c	70	52	0·70
Molong ..	r	64	54	1·00
Moree	b	81	59	0
Moruya ..	g	70	58	0·01
Moss Vale	r	64	53	0·05
M. Victoria	p	68	49	0·08
Mudgee ..	p	77	47	0·02
Murrumbh	c	59	54	0·58
Murr'r'ndi	o	74	58	0
Mus'lbrook	g	84	61	0
Narrabri ..	g	93	67	0
Newcastle	g	71	59	0
Nowra	-	—	—	—
Orange ..	r	61	51	1·37
Picton	g	73	60	0·01
P.M'quarie	b	68	56	0
P.Stephens	g	79	60	0
Qu'nbeyan	g	71	55	0·45
Quirindi ..	u	83	59	0
Singleton	g	80	56	0
SYDNEY ..	g	76	63	0
Tamworth	-	—	—	—
Taralga ..	p	74	49	0·15
Taree	g	82	55	0
T'nt'rfield	b	77	—	0
Wagga....	c	65	52	1·10
Walcha ..	b	71	36	0
Walgett ..	u	85	61	0
Wentw'rth	b	73	39	0·25
Wilcannia	-	—	—	—
Woll'ng'ng	c	75	58	0
Young ..	u	62	52	0·88



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fanning for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Esperance Bay, cloudy with fresh N.E. wind and moderate sea; barometers 30·25 and falling; rain 13th, 0·16.

South Australia reports weather generally fine, few scattered clouds on and near coast and between Farina and Tennant's Creek; wind southerly, light; rain recorded inland to Barrow Creek heaviest (1·85) at Beltana, and (0·36) at Farina and Blinman; moderate sea, rising barometers, and light S.W. winds on coast. Rainfall: Port Darwin, 0·01; Alice Springs, 0·66; Peake, 0·57; Gunaldi, 1·17; Eucla, 0·01; Streaky Bay, 0·04; Cape Borda, 0·12; Adelaide, 0·01; Robe, 0·12; and M'Donnell Bay, 0·03.

Victoria.—Cloudy and unsettled on coast, with light S.W. wind, rising barometers, and rather rough sea; fine inland at Echuca, with fresh W.S.W. wind. Rainfall: Melbourne, 1·25; Portland, 1·39; Cape Otway, 0·04; Wilson's Promontory, 0·95; Lake Entrance, 1·00; Echuca, 0·28; and Omeo, 0·39.

Tasmania.—Fine on N. coast, with fresh W. breeze. Rain, 13th: Low Heads, 0·01.

New Zealand.—Russell, barometer 30·50, wind calm, generally fine and clear; Wellington, barometer 30·40, wind N.W., generally fine and clear; Bluff, barometer 30·30, wind N.E., generally fine and clear.

New South Wales.—Generally cloudy and unsettled. Showery on mountains and western slopes as far inland as Mudgee, Forbes, and Dubbo. (For details see map above.) Heaviest rain recorded, 2·06 at Albury. Smooth sea, steady barometers, and light to fresh N.W. winds prevail on coast. Temora, dull, rain, 0·62; Mitchell, Sunny Corner, raining. 0·35; Gundaroo, clearing, 0·75.

Queensland.—Generally fine and clear on E. coast, sea moderate and rather rough. Wind S.E. Rainfall: Brisbane, 0·06; Cape Moreton, 0·02; Rockhampton, 0·03.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 13, cloudy, temperature 54°; Cape Otway, W.S.W., 8, foggy and misty, rough sea, temperature 55°; Portland, S.W., 23, fine, smooth sea, temperature 56°; Wilson's Promontory, W., 28, fine, moderate sea, temperature 55°.

New South Wales.—Albury, W.N.W., 28, fine, temperature 62°; Cape St. George, S.E., 28, cloudy, moderate sea, temperature 63°; Clarence River, N.E., 56, fine, moderate sea, temperature 70°; Deniliquin, calm, 0, fine, temperature 72°; Dubbo, W., showery, temperature 68°; Eden, S.W., 28, fine, smooth sea, temperature 60°; Goulburn, W. 14, cloudy, temperature 62°; Menindie, S., fine, temperature 62°; Newcastle, S.W., 14, cloudy, smooth sea, temperature 71°; Port Macquarie, N.N.E., 42, cloudy, moderate sea, temperature 72°; Sydney, W., 6, cloudy, smooth sea, temperature 66°; Wentworth, S.W., fine, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 6 inches above summer level; at Hay, 5 feet above summer level; at Balranald, 8 feet above summer level. Murray: At Albury, 10 feet 3 inches above summer level; at Euston, 10 feet 1 inch above summer level. Darling: At Wentworth, 8 feet 6 inches above summer level; at Pooncarie, 6 inches above summer level; at Menindie, low.

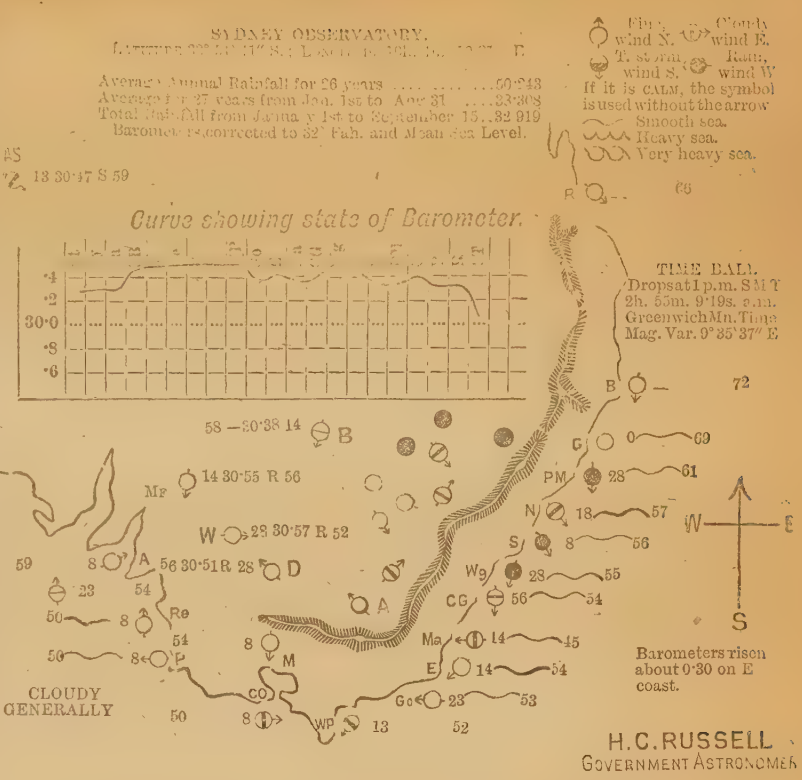
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 15.

Sun rises at 6.1, sets at 5.50; Moon, 1.20 a.m., 11.52 p.m.; Mercury, 5.14 a.m., 4.30 p.m.; Venus, 7.34 a.m., 8.33 p.m.; Mars, 3.26 a.m., 1.27 p.m.; Jupiter, 5.42 a.m., 5.23 p.m.; Saturn, 1.54 a.m., 11.50 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 15: —— a.m., 12.19 p.m.

METEOROLOGICAL REPORT AND MAP FOR SEPTEMBER 15, 1885.

Stations	W.T.	Max.	Min.	Rain
Albury ..	c	65	45	0
Adelaide ..	r	61	56	0·32
Balranald	b	73	34	0
Bathurst ..	g	61	48	0
Bend'n. eer	r	65	56	0·62
Bodalla ..	g	72	44	0·07
Bourke ..	g	67	56	0·37
Caind'n H.	r	76	62	0·90
C. St. Geo.	g	66	50	0·09
Carcoar ..	b	63	—	0·11
Casino	—	—	—	—
Cassilis ..	p	67	56	0·11
Clarence ..	c	80	59	0
Condob'lin	c	51	31	0
Cooma	c	67	39	0
Coonab'n.	g	70	58	0·04
Coonamble	u	—	—	0
Cowra	b	71	61	0·04
Deniliquin	b	64	35	0
Dubbo ..	q	66	32	0·10
Eden	b	64	47	0
Euston ..	b	67	38	0
Forbes....	b	70	43	0
Glen Innes	u	74	50	0
Goulburn	g	65	43	0
Grafton ..	g	93	58	0
Gunnedah	r	75	59	0·34
Hay	b	68	41	0
Hill End	b	—	—	0·07
Inverell ..	r	71	41	0
Kiandra ..	f	51	30	0
Lismore ..	—	—	—	—
Maitland ..	r	78	58	0·65
Marsdens	b	65	51	0
Menindie	b	61	42	0
Molong ..	g	61	42	0·40
Moree	r	81	61	0
Moruya ..	c	66	49	0·12
Moss Vale	u	62	43	0·13
M. Victoria	d	59	39	0·04
Mudgee ..	o	63	50	0·16
Murrumbh	c	58	48	0
Murr'r'ndi	r	66	49	0·65
Mus'lbrook	b	77	52	0·36
Nrrrabri ..	u	92	59	0·31
Newcastle	q	72	55	0·97
Nowra	c	69	51	0·09
Orange ..	g	60	44	0·09
Picton	o	69	53	0
P. M'quarie	r	71	59	0·91
P. Stephens	r	82	57	1·01
Qu'nbeyan	u	64	43	0
Quirindi ..	d	71	59	0·24
Singleton	r	67	57	0·50
SYDNEY ..	d	69	55	0·07
Tamworth	r	75	55	0·65
Taralga ..	d	59	41	0·07
Taree	r	81	60	0·73
T'nt'rfield	u	74	43	0
Wagga....	b	63	38	0
Walcha ..	r	68	51	0·59
Walgett ..	r	75	59	0·15
Wentw'rth	b	64	42	0
Wilcannia	b	—	—	0
Woll'ng'ng	q	69	53	0·01
Young	d	71	34	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; n, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pe, Perth; Av, Albany; Ea, Eucla; CB, Ceye Bonda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia reports weather fine, with light S.E. wind generally, smooth sea, and falling barometers. Rain at Albany measured 1·48.

South Australia.—Weather cloudy generally, with N. winds, scattered clouds between Charlotte and Port Darwin; steady barometers, and smooth sea.

Victoria.—Weather fine generally, with light variable winds, steady barometers, and smooth sea.

Tasmania.—At Low Heads: Weather fine, wind light from N.E.; barometer reading, 30·5.

New Zealand.—Russell, barometer 30·4, wind S.W., fine; Wellington, barometer 30·1, wind N.W., gloomy; Bluff, barometer 29·7, wind N., fine.

New South Wales.—Weather cloudy generally; raining on coast, especially north of Sydney, and in the country near the mountains, wind S. and S.E. generally, and smooth sea generally. (For particulars see map above.)

Queensland.—Weather fine generally. Wind variable at Cooktown rather strong from S.E. Barometer slightly risen. Sea smooth generally, except at Cooktown, where it is rough. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 13, fine, temperature 57°; Cape Otway, S.S.E., 8, hazy, smooth sea, temperature 61°; Portland, E.S.E., 13, fine, smooth sea, temperature 57°; Wilson's Promontory, S.W., 13, fine, smooth sea, temperature 57°.

New South Wales.—Albury, W., fine, temperature 60°; Cape St. George, S., 42, cloudy, smooth sea, temperature 58°; Clarence River, S., 14, cloudy, smooth sea, temperature 75°; Deniliquin, calm, fine, temperature 57°; Dubbo, E., fine, temperature 66°; Eden, E.S.E., 14, fine, smooth sea, temperature 56°; Goulburn, S.E., 14, dull, temperature 60°; Moruya, E., 28, fine, smooth sea, temperature 59°; Newcastle, S.E., 28, stormy, moderate sea, temperature 60°; Port Macquarie, S., 28, raining, moderate sea, temperature 66°; Sydney, S., raining, smooth sea, temperature 56°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 8 feet above summer level; at Hay, 5 feet above summer level; at Balranald, 8 feet above summer level. Murray: At Albury, 11 feet 11 inches above summer level. Darling: At Wentworth, 8 feet 6 inches above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 16.

Sun rises at 6, sets at 5.51; Moon, 11.5 a.m.; Mercury, 5.14 a.m., 4.30 p.m.; Venus, 7.33 a.m., 8.35 p.m.; Mars, 3.24 a.m., 1.26 p.m.; Jupiter, 5.40 a.m., 5.20 p.m.; Saturn, 1.50 a.m., 11.46 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 16: 12.40 a.m., 1.5 p.m.

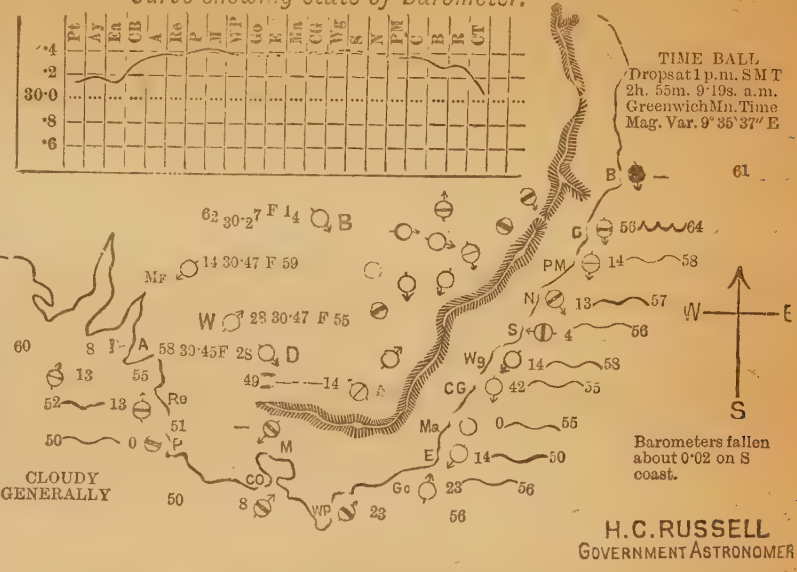
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 16, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	u	69	45	0
Armidale	u	56	42	1·43
Balranald	b	73	30	0
Bathurst..	g	58	44	0
Bend'meer	u	60	44	1·03
Bodalla ..	b	70	34	0
Bourke ..	c	74	52	0
Camd'n H.	u	76	57	1·59
C. St. Geo.	b	56	46	0
Carcoar ..	b	52	48	0
Casino	c	88	56	0·12
Cassilis ..	u	76	52	0·02
Clarence ..	u	80	58	0·35
Condob'lin	b	57	16	0
Cooma....	c	66	36	0
Coonab'n.	b	64	39	0·01
Coonamble	b	—	—	0
Cowra	g	72	60	0
Deniliquin	b	73	40	0
Dubbo ..	b	63	43	0
Eden	c	62	51	0
Euston ..	b	71	34	0
Forbes....	b	60	46	0
Glen Innes	u	53	47	0·35
Goulburn	g	55	44	0
Grafton ..	u	83	48	0·45
Gunnedah	b	75	51	0·32
Hay	b	66	41	0
Hill End	b	—	—	0
Inverell ..	u	71	43	0·71
Kiandra ..	c	50	21	0
Lismore ..	p	82	60	0·69
Maitland..	g	66	50	0·09
Marsdens	b	71	52	0
Menindie	b	65	48	0
Molong ..	b	65	42	0
Moree	g	65	52	0·78
Moruya ..	b	62	44	0
Moss Vale	u	50	43	0
M. Victoria	d	50	40	0·22
Mudgee ..	g	65	42	0
Murrumbh	b	64	49	0
Murr'r'ndi	c	58	47	0·27
Mus'lbrook	c	65	49	0·04
Narrabri ..	c	84	50	0·57
Newcastle	g	61	55	0·24
Nowra	—	—	—	—
Orange ..	c	59	43	0
Picton	c	59	51	0·03
P. M'quarie	g	65	53	1·31
P. Stephens	g	75	53	0·27
Qu'nbeyan	c	56	41	0
Quirindi ..	b	68	47	0·08
Singleton	b	60	56	0·10
SYDNEY ..	g	59	52	0·13
Tamworth	b	56	49	0·56
Taralga ..	u	73	40	0·12
Taree	p	65	54	0·21
T'nt'rfield	u	74	51	0·37
Wagga....	g	69	46	0
Walcha ..	g	55	43	0·89
Walgett ..	b	72	50	0·13
Wentw'rth	b	69	40	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	63	52	0·07
Young	g	78	46	0·08

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 16..32·045
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy wind E. — T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



Barometers fallen about 0·02 on S coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

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Western Australia.—Generally fine and clear with light variable winds and smooth sea; no rain.

South Australia reports weather generally dull in southern parts, and fine but cloudy in north; winds generally light from N.E. and N., smooth sea, falling barometers, and light N.N.E. winds coast. Rainfall: Port Darwin, 0·04.

Victoria.—Cloudy generally, sea smooth, barometers falling, winds light and variable; foggy at Melbourne, S.W. wind and fine but cloudy at Echuca; no rain.

Tasmania.—Fine but cloudy on N. coast, with light S.S.W. winds.

New Zealand.—Russell, barometer 30·20, wind S.W., generally fine and clear; Wellington, barometer 30·00, calm, generally fine and clear; Bluff, barometer 29·90, wind S.W., generally fine and clear.

New South Wales.—Generally cloudy, but clearing; heavy rains have fallen in the New England district, where the weather was very gloomy; cloudy weather is also reported on the N. S. of Sydney, and on the mountains generally; fine inland; rough sea, falling barometers, and S.W. and S.E. wind on coast. Details of rain, &c., in map.

Queensland.—Weather fine generally, raining about Brisbane; winds southerly generally, and rather strong at Cooktown; barometer fallen slightly generally; sea moderately smooth generally, but rough off Cooktown; rain measured at Brisbane, 0·30.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 12, cloudy, barometers falling, temperature 54°; Cape Otway, E., 6, misty, smooth sea, temperature 56°; Portland, E., 12, cloudy, smooth sea, temperature 55°; Wilson's Promontory, N.E., 6, cloudy, smooth sea, temperature 53°.

New South Wales.—Albury, N.W., cloudy, temperature 60°; Cape St. George, S., 14, fine, smooth sea, temperature 62°; Clarence River, S., threatening, heavy sea, temperature 70°; Deniliquin, W., fine, temperature 61°; Dubbo, N.E., fine, temperature 66°; Eden, N.E., fine, temperature 59°; Goulburn, calm, fine, temperature 60°; Menindie, S.E., fine, temperature 62°; Moruya, N.E., 42, cloudy, moderate sea, temperature 61°; Newcastle, E., 14, dull, smooth sea, temperature 64°; Port Macquarie, S., 28, cloudy moderate sea, temperature 67°; Sydney, E., 14, cloudy, smooth sea, temperature 59°; Wentworth, calm, fine, temperature 62°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 10 feet 3 inches above summer level; at Hay, 5 feet above summer level; at Balranald, 6 feet above summer level. Murray: At Albury, 11 feet 10 inches above summer level. Darling: At Wentworth, 8 feet 7 inches above summer level; at Pooncarie, low; at Menindie, low; at Wilcannia, low; at Bourke, low.

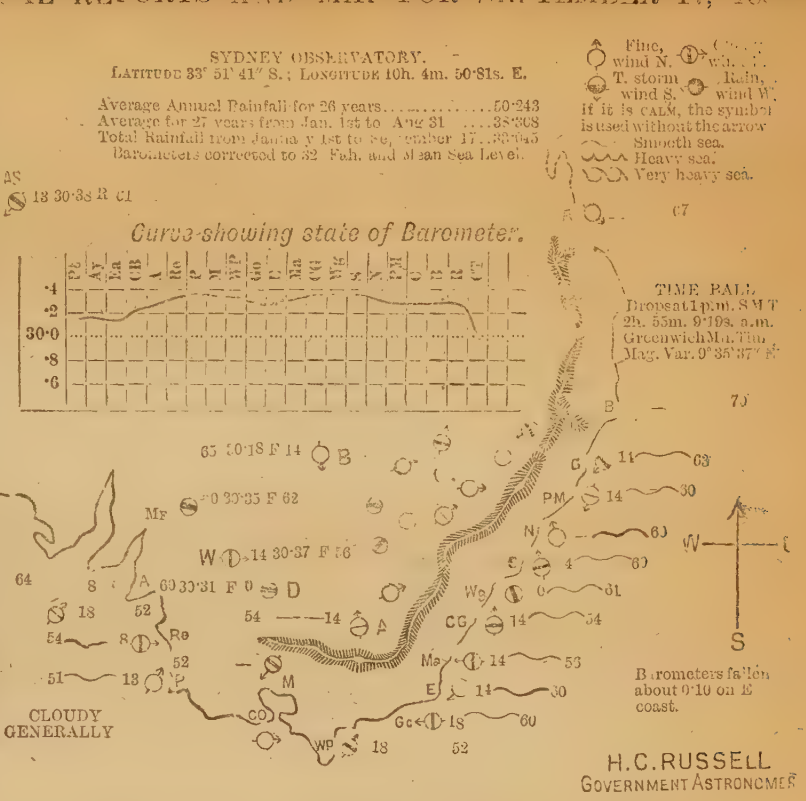
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 17.

Sun rises at 5·58, sets at 5.52; Moon, 11.53 a.m., sets 12·43 a.m.; Mercury, 5.13 a.m., 4.30 p.m.; Venus, 7.32 a.m., 8.37 p.m.; Mars, 3.22 a.m., 1.25 p.m.; Jupiter, 5.38 a.m., 5.17 p.m.; Saturn, 1.47 a.m., 11.43 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 17: 1.29 a.m., 1.59 p.m

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 17, 1895

Stations	wt	Mx	Mn	r'in
Albury ..	u	69	49	0
Armidale	c	56	47	0
Balranald	g	82	33	0
Bathurst..	g	67	44	0
Bend'meer	f	60	41	0
Bodalla ..	g	68	45	0
Bourke ..	b	30	52	0
Camd'n H.	b	65	51	0
C. St. Geo.	g	65	52	0
Carcoar ..	b	59	50	0
Casino	c	71	51	0
Cassilis ..	g	62	48	0
Clarence ..	c	79	54	0
Condob'lin	c	59	43	0
Cooma	g	69	39	0
Coonab'n.	c	75	58	0
Coonamble	b	—	—	0
Cowra	c	69	59	0
Deniliquin	c	74	42	0
Dubbo ..	c	78	50	0
Eden	c	60	51	0
Euston ..	c	79	47	0
Forbes....	b	71	53	0
Glen Innes	c	65	47	0
Goulburn	g	68	43	0
Grafton ..	c	73	53	0
Gunnedah	c	75	50	0
Hay	c	73	51	0
Hill End	b	—	—	0
Inverell ..	u	68	53	0
Kiandra ..	c	—	31	0
Lismore ..	b	68	57	0
Maitland..	b	67	48	0
Marsdens	c	71	56	0
Menindie	g	67	52	0
Molong ..	b	70	42	0
Moree	c	74	50	0
Moruya ..	g	65	44	0
Moss Vale	c	58	46	0
M. Victoria	c	57	42	0
Mudgee ..	g	80	43	0
Murrumbh	c	77	50	0
Murr'r'ndi	b	62	43	0
Mus'lbrook	b	72	43	0
Nrrrabri ..	b	88	51	0
Newcastle	c	63	54	0
Nowra ...	–	–	–	—
Orange ..	c	60	48	0
Picton	c	68	49	0
P. M'quarie	c	66	48	0
P.Stephens	b	56	50	0
Qu'nbeyan	b	60	45	0
Quirindi ..	b	78	48	0
Singleton	b	65	51	0
SYDNEY ..	c	64	52	0
Tamworth	b	67	47	0
Taralga ..	u	68	48	0
Taree	b	65	51	0
T'nt'rfield	u	69	44	0
Wagga....	b	60	47	0
Walcha ..	f	54	44	0
Walgett ..	b	76	51	0
Wentw'rth	g	73	51	0
Wilcannia	c	--	—	0
Woll'ng'ng	g	70	53	0
Young	g	65	54	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c. detached clouds; d. drizzling rain; f, fog; g. gloomy; h, hazy; m. misty; n, frosty; o. overcast; p. passing showers; r. rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pe, Perth; Ay, Albany; Ba, Lucia; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland, M, Melbourne, W P, Wilson's Promontory; Sb, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindi, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light variable winds and calms; sea smooth; no rain; dense fog at Esperance Bay.

South Australia reports weather generally dull; scattered clouds in Central Australia and Northern Territory; winds generally light from E. and N.; smooth sea, falling barometers, and light N.E. winds on coast.. Rainfall: Peake, 0·13, and still falling: Eucla, 0·36; and Streaky Bay, 0·06.

Victoria.—Generally cloudy; fine in south-west at Portland and Cape Otway; sea smooth, barometers falling, winds light from N.E.; fine, but cloudy, inland at Echuca; dull at Omeo; foggy at Melbourne. No rain.

Tasmania.—Fine and clear on north coast, with light S.S.E. wind.

New Zealand.—Russell: Barometer 30·20, wind S.W., dull. Wellington: Barometer 29·90, wind N.W., fine. Bluff: Barometer 29·90, wind S.W., passing showers.

New South Wales.—Generally cloudy, but clearing; weather still dull in the New England districts; cloudy on coast, with smooth sea, falling barometers, and light northerly wind. No rain; cloudy in S. on Victorian border. (Details in map above.)

Queensland.—Fine on E. coast, with light southerly and S.E. winds and moderate sea. Rainfall—Brisbane, 0·02.

3 P.M. OBSERVATIONS.

Victoria.—Barometers falling. Melbourne, S.S.W., 12, cloudy, temperature 58°; Cape Otway, E.N.E., 6, misty, moderate sea, temperature 58°; Portland, E.S.E., 24, cloudy, fine, smooth sea, temperature 56°; Wilson's Promontory, N.E., 24, squally, moderate sea, temperature 59°.

New South Wales.—Albury, N.W., cloudy, temperature 62°; Cape St. George, calm, sky half clouded, smooth sea, temperature 64°; Deniliquin, calm, dull, temperature 71°; Eden, 14, E., fine, slight sea, temperature 61°; Goulburn, calm, dull, temperature 61°; Menindie, calm, dull, temperature 66°; Moruya, S.S.E., 4, fine, smooth sea, temperature 62°; Port Macquarie, S.S.E., 28, fine, smooth sea, temperature 70°; Sydney, E.N.E., 8, cloudy, smooth sea, temperature 63°; Wentworth, N.E., 8, dull, temperature 81°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 14 feet 9 inches above summer level; at Hay, 4 feet 11 inches above summer level; at Balranald, 7 feet 5 inches above summer level. Murray: At Albury, 11 feet 9 inches above summer level; at Euston, 10 feet above summer level. Darling: At Wentworth, 7 feet above summer level; at Pooncarie, low; at Menindie, low; at Wilcannia, low; at Bourke, low.

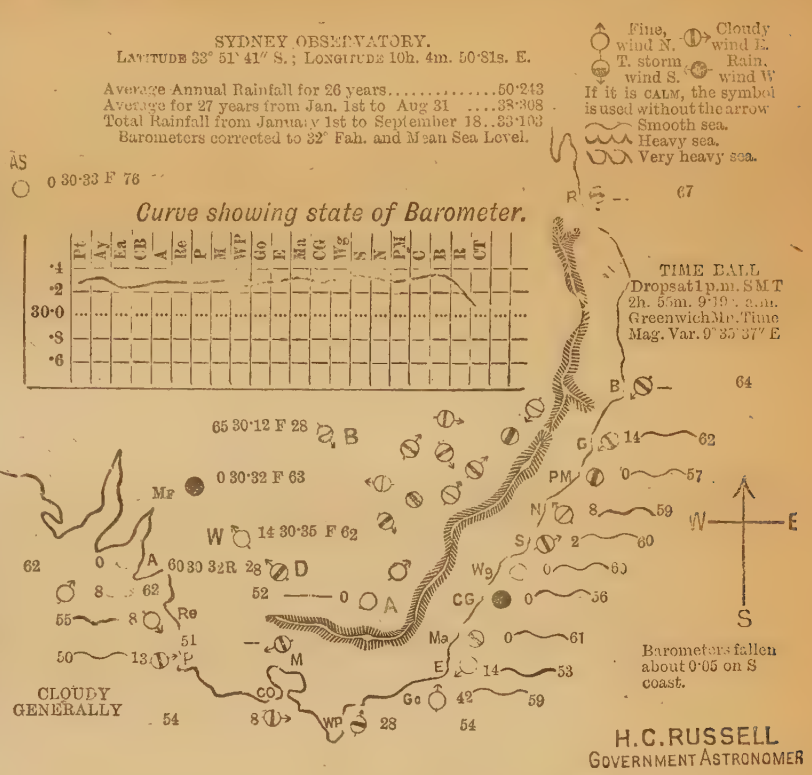
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 18.

Sun rises at 5·57, sets at 5.53; Moon, 12.12 p.m., sets 1·31 a.m.; Mercury, 5.13 a.m., 4.30 p.m.; Venus, 7.31 a.m., 8.39 p.m.; Mars, 3.21 a.m., 1.24 p.m.; Jupiter, 5.36 a.m., 5.14 p.m.; Saturn, 1,43 a.m., 11.39 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 18: 2.28 a.m., 3.3 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 18, 1885.

Stations	W.T.	Mx	Mn	R'in
Albury ..	c	72	46	0
Armidale	u	66	47	0
Balranald	e	81	48	0·03
Bathurst..	g	69	49	0
Bend'meer	u	58	49	0
Bodalla ..	b	69	44	0·02
Bourke ..	u	85	61	0
Camd'n H.	u	66	57	0
C. St. Geo.	p	64	51	0·05
Carcoar ..	g	62	51	0
Casino	c	80	59	0
Cassilis ..	c	67	52	0·04
Clarence ..	u	79	60	0
Condob'lin	u	60	41	0·03
Cooma	g	75	46	0
Coonab'n.	g	76	53	0·03
Coonamble	u	—	—	0
Cowra	c	70	61	0
Deniliquin	g	76	36	0
Dubbo ..	g	78	51	0·07
Eden	c	63	54	0
Euston ..	g	80	53	0
Forbes....	u	70	49	0
Glen Innes	u	72	49	0
Goulburn	c	75	45	0
Grafton ..	g	87	49	0
Gunnedah	g	75	58	0
Hay	r	76	51	0
Hill End	u	—	—	0
Inverell ..	u	67	57	0
Kiandra ..	c	51	38	0
Lismore ..	u	78	63	0
Maitland..	b	69	56	0
Marsdens	c	73	57	0
Menindie	p	72	58	0·04
Molong ..	o	71	52	0
Moree	u	82	49	0
Moruya ..	c	56	51	0
Moss Vale	c	58	[illegible]	0
M. Victoria	u	62	43	0·10
Mudgee ..	g	73	46	0
Murrumbh	c	74	51	0
Murr'r'ndi	d	65	49	0
Mus'lbrook	g	70	51	0
Nrrrabri ..	u	90	58	0
Newcastle	c	67	56	0
Nowra	c	69	49	0
Orange ..	g	62	45	0
Picton	c	70	49	0
P. M'quarie	g	68	52	0
P.Stephens	g	77	51	0
Qu'nbeyan	b	63	39	0
Quirindi ..	u	75	54	0
Singleton	b	65	51	0
SYDNEY ..	g	66	55	0·06
Tamworth	c	68	54	0
Taralga ..	u	71	50	0
Taree	c	73	53	0
T'nt'rfield	u	73	--	0
Wagga....	b	[illegible]	51	0
Walcha ..	g	6	44	0
Walgett ..	g	78	55	0
Wentw'rth	c	72	55	0
Wilcannia	u	--	—	0
Woll'ng'ng	c	79	54	0
Young	g	81	44	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b tanding for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Ws, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light S.E. winds and smooth sea; cloudy on south. coast; rough sea at Albany; no rain.

South Australia repoits weather generally fine, with scattered clouds in parts; winds light from S.E. and N.E., and calm; light rains recorded W. of Port Lincoln and N. of Adelaide to Beltana; heaviest, 0·39 at Quorn, and 0·35 at Elliston; smooth sea and rising barometers on S. coast; fine in N. territory. Rainfall: Port Augusta, 0·29; Eucla, 0·04; and Streaky Bay, 0·24.

Victoria.—Generally cloudy on coast, with light variable winds, moderate sea, falling barometer, and misty foggy weather; fine inland at Echuca, with fresh S.S.E. wind; foggy at Omeo, Melbourne, and Portland; no rain.

Tasmania.—Dull on north coast; wind fresh from N.E.

New Zealand.—Russell: Barometer 30·00, wind calm, fine. Wellington: Barometer 30·00, wind S.E., passing showers (0·13 rain). Bluff: Barometer 30·20, wind S., fine.

New South Wales.—Generally cloudy and unsettled, vide details in map above; showery inland at Menindie and on the coast at Cape St. George. Winds light and calm; direction vary from N.E. to S.E. Smooth sea, steady barometer, and light airs and calms on coast.

Queensland.—Fine N. of Rockhampton; cloudy S. at Brisbane; winds S. and S.S.; sea moderate. Rainfall—Cooktown, 0·03.

3 P.M. OBSERVATIONS.

Victoria.—Barometers falling. Melbourne, S.S.W., 12, fine, temperature 56°; Cape Otway, E., 6, fine, moderate sea, temperature 62°; Portland, S., 18, fine, smooth sea, temperature 59°; Wilson's Promontory, N.E., 18, clouds from N.E., moderate sea, temperature 64°.

New South Wales.—Albury, S.W., fine, temperature 64°; Cape St. George, N.E., 14, fine, smooth sea, temperature 64°; Deniliquin, N., fine, temperature 72°; Dubbo, E., cloudy, temperature 63°; Eden, N.E., 14, fine, smooth sea, temperature 61°; Goulburn, calm, dull, temperature 61°; Menindie, S.W., threatening, temperature 66°; Moruya, N.E., 28, fine, smooth sea, temperature 63°; Newcastle, N.E., 28, fine, smooth sea, temperature 63°; Port Macquarie, S.S.E., 28, fine, smooth sea, temperature 67°; Sydney, E.N.E., 10, cloudy, smooth sea, temperature 61°; Wentworth, N.E., fine, temperature 62°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 12 feet 10 inches above summer level; at Hay, 4 feet 9 inches above summer level; at Balranald, 7 feet 3 inches above summer level. Murray: At Albury, 13 feet 8 inches above summer level; at Euston, 10 feet 1 inch above summer level. Darling: At Wentworth, 8 feet 7 inches above summer level; at Pooncarie, low; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 18.

Sun rises at 5·56, sets at 5.53; Moon, 1.34 p.m., sets 2·16 a.m.; Mercury, 5.13 a.m., 4.30 p.m.; Venus, 7.30 a.m., 8.41 p.m.; Mars, 3.19 a.m., 1.23 p.m.; Jupiter, 5.34 a.m., 5.11 p.m.; Saturn, 1.39 a.m., 11.35 p.m. New moon, 9th; full moon, 24th.

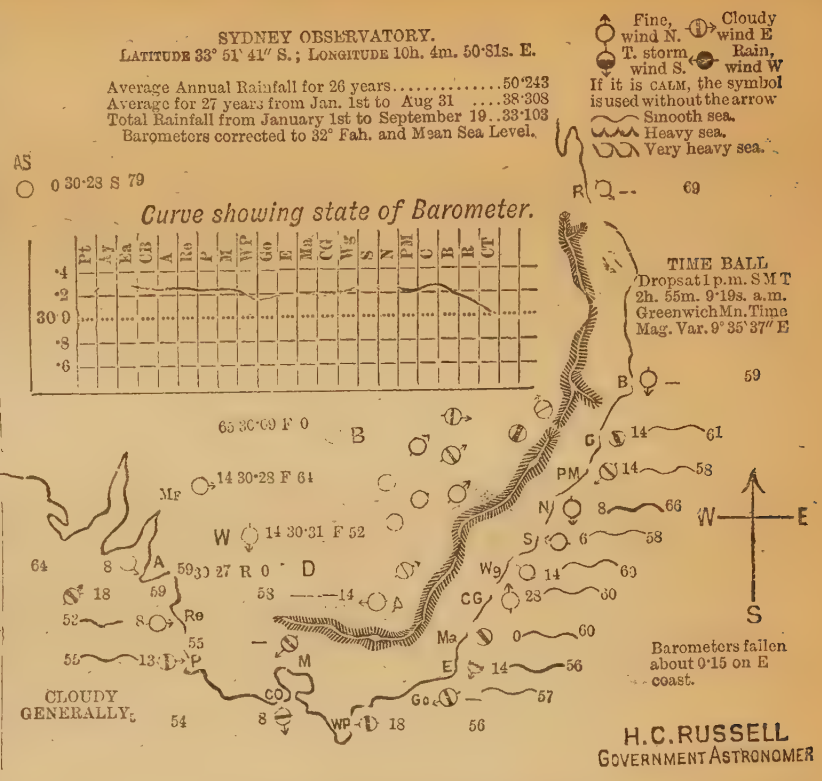
High water at Fort Denison, September 19: 3.37 a.m., 4.12 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 19, 1885

Stations	wt	Mx	Mn	r'in
Albury ..	c	79	52	0·15
Armidale	u	56	45	0
Balranald	b	82	35	0
Bathurst..	b	58	42	0
Bend'meer	u	64	48	0
Bodalla ..	c	70	38	0
Bourke ..	b	87	56	0
Camd'n H.	u	66	56	0
C. St. Geo.	c	68	48	0
Carcoar ..	b	58	48	0
Casino	b	70	54	0·09
Cassilis ..	u	60	53	0·05
Clarence..	u	66	57	0
Condob'lin	c	–	44	0·02
Cooma....	c	73	38	0
Coonab'n.	g	73	53	0
Coonamble	b	—	—	0
Cowra	b	66	59	0
Deniliquin	b	76	46	0
Dubbo ..	c	65	52	0
Eden	c	63	52	0
Euston ..	f	86	56	0
Forbes....	b	70	51	0
Glen Innes	g	53	42	0
Goulburn	b	65	39	0
Grafton ..	u	72	59	0
Gunnedah	c	75	57	0
Hay	b	71	46	0·07
Hill End	b	—	—	0·06
Inverell ..	o	69	57	0
Kiandra ..	c	55	38	0
Lismore ..	c	68	59	0·07
Maitland..	b	69	53	0
Marsdens	b	61	52	0·14
Menindie	c	66	54	0
Molong ..	b	71	51	0·12
Moree	g	75	52	0
Moruya ..	c	69	48	0
Moss Vale	b	60	40	0
M. Victoria	b	55	35	0·08
Mudgee ..	u	66	46	0·13
Murrumbh	b	66	45	0
Murr'r'ndi	u	63	51	0·07
Mus'lbrook	g	74	50	0.02
Nrrrabri ..	u	86	50	0
Newcastle	c	68	56	0
Nowra	–	—	—	—
Orange ..	b	55	43	0·03
Picton	b	66	45	0
P. M'quarie	u	66	54	0·14
P.Stephens	c	79	53	0
Qu'nbeyan	c	61	47	0
Quirindi ...	u	72	52	0
Singleton	b	62	56	0
SYDNEY ..	b	64	50	0
Tamworth	c	70	55	0
Taralga ..	b	65	48	0
Taree	c	73	53	0·07
T'nt'rfield	u	58	44	0
Wagga....	b	65	41	0
Walcha ..	g	57	44	0
Walgett ..	b	77	55	0
Wentw'rth	f	77	49	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	69	47	0
Young	b	61	42	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 19..33·103
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

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In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light S.E. winds and smooth sea; dull on south coast, light rain falling, with fresh S.E. wind and rough sea at Albany. Rainfall: Esperance Bay, 0·02; Albany, 0·05.

South Australia.—Reports scattered clouds; dull in parts, winds S.E. to N.E., and calms. Calm and fine in Northern Territory; strong E. wind, with cloudy weather, in Central Australia. Steady barometer, smooth sea, and easterly winds on coast. Rainfall: Nil.

Victoria. — Generally cloudy and dull, with light to fresh westerly and S.W. winds and calms, smooth sea and steady barometers on coast; fine but cloudy inland at Echuca. Rainfall: Lake Entrance, 0·08.

Tasmania.—Fine and clear, with fresh W.S.W. wind.

New Zealand.—Russell: Barometer, 30·00; wind, S.E., dull. Wellington: Barometer, 30·10; wind, S.E., fine. Bluff: Barometer, 30·10; calm, fine.

New South Wales.—Generally fine; dull in places, chiefly in the north, on the high lands of New England district, and over the Clarence and Richmond Country; thick fog inland at Wentworth; smooth sea, clear weather, light westerly winds and falling barometers on coast; N.E. to S.E. winds and calms inland. (Details on map above.)

Camden reports fine clear weather. Rainfall, 0.65.

Queensland.—Generally fine and clear, with S. and S.E. winds and smooth sea. Rainfall—Brisbane, 0.22; Cape Moreton, 0.33.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, S.W., 1, fine but cloudy, moderate sea, temperature 61°; Portland, S.E., 2, fine, smooth sea, temperature 59°; Wilson's Promontory, fine but cloudy, slight sea, temperature 60°.

New South Wales.—Albury, N.E., cloudy, fine, temperature 66°; Cape St. George, N., 2, fine, smooth sea, temperature 64°; Clarence River, E. light, dull, smooth sea, temperature 65°; Deniliquin, calm, fine, clear, temperature 64°; Dubbo, N.E., 1, fine, temperature 64°; Eden, E.S.E., 1, fine, light E. sea, temperature 58°; Goulburn, calm, fine, temperature 61°; Menindie, calm, cloudy, warm, temperature 66°; Moruya, N.E., 2, fine, temperature 63·5; Newcastle, N.E., light, fine, smooth sea, temperature 64°; Port Macquarie, E.S.E., cloudy, smooth sea, temperature 66·8; Sydney, E.N.E., light, fine, smooth sea, temperature 64°; Wentworth, calm, fine, clear, temperature 64°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 10 feet 6 inches above summer level; at Hay, 4 feet 8 inches above summer level; at Balranald, 7 feet above summer level. Murray: At Albury, 13 feet above summer level; at Euston, 10 feet 1 inch above summer level. Darling: At Wentworth, 8 feet 7 inches above summer level; at Pooncarie, low; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 21.

Sun rises at 5·54, sets at 5.54; Moon, 2.26 p.m., 2·58 a.m.; Mercury, 5.12 a.m., 4.30 p.m.; Venus, 7.29 a.m., 8.45 p.m.; Mars, 3.16 a.m., 1.22 p.m.; Jupiter, 5.30 a.m., 5.6 p.m.; Saturn, 1.32 a.m., 11.28 p.m. New moon, 9th; full moon, 24th.

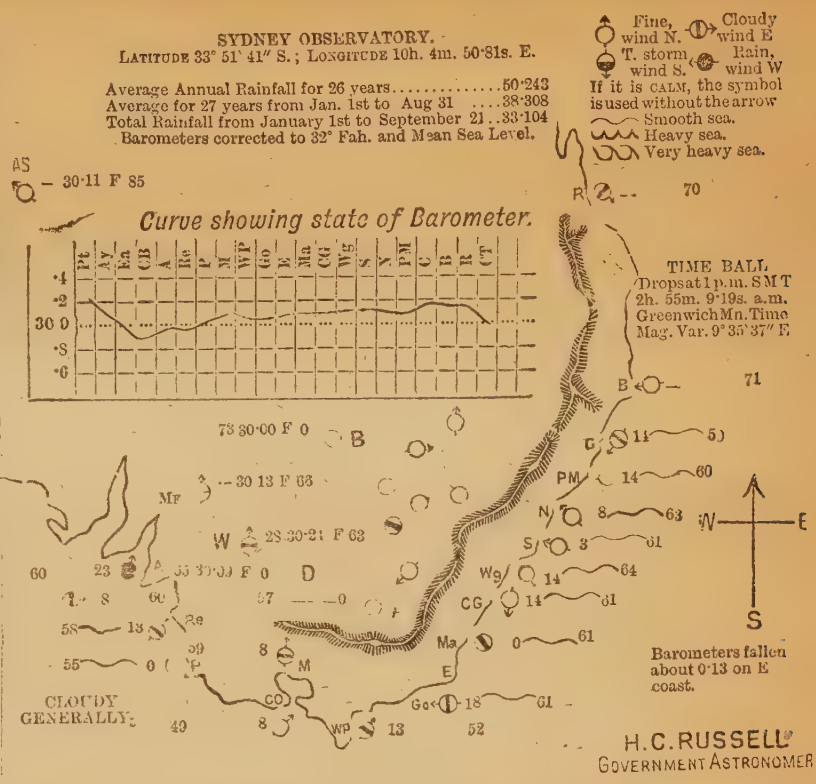
High water at Fort Denison, September 21: 5.49 a.m., 6.15 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 21, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	74	48	0·10
Armidale	b	70	48	0·04
Balranald	c	88	41	0
Bathurst..	c	72	40	0
Bend'meer	b	70	45	0
Bodalla ..	c	73	50	0·06
Bourke ..	b	94	61	0
Camd'n H.	b	69	53	0
C. St. Geo.	b	69	54	0
Carcoar ..	b	62	46	0
Casino	-	—	—	—
Cassilis ..	b	64	49	0·02
Clarence ..	c	80	58	0·07
Condob'lin	b	63	44	0·10
Cooma.....	c	58	43	0·10
Coonab'n.	b	76	42	0·15
Coonamble	b	—	—	0
Cowra	b	65	56	0
Deniliquin	b	79	47	0
Dubbo ..	q	82	48	0·03
Eden	-	—	—	—
Euston ..	g	89	51	0
Forbes....	b	70	46	0
Glen Innes	r	60	43	0·47
Goulburn	b	72	47	0
Grafton ..	c	79	56	0·06
Gunnedah	t	87	38	0·57
Hay	b	72	41	0
Hill End	b	—	—	0
Inverell ..	u	68	50	1·38
Kiandra ..	c	58	39	0·27
Lismore ..	t	65	52	0·16
Maitland..	b	72	49	0
Marsdens	b	73	53	0·01
Menindie	c	78	59	0
Molong ..	a	71	41	0
Moree	b	84	58	0
Moruya ..	c	68	56	0
Moss Vale	c	64	47	0
M. Victoria	-	—	—	—
Mudgee ..	b	84	42	0
Murrumbh	b	77	46	0
Murr'r'ndi .	b	70	47	0
Mus'lbrook	b	75	46	0
Nrrrabri ..	b	98	56	0·32
Newcastle	b	68	58	0
Nowra	c	71	51	0
Orange ..	c	63	45	0
Picton	b	70	49	0
P. M'quarie	b	70	50	0
P.Stephens	c	78	50	0
Qu'nbeyan	b	66	48	0·15
Quirindi ..	b	81	51	0
Singleton	b	70	69	0
SYDNEY ..	c	67	54	0
Tamworth	c	54	49	0·23
Taralga ..	b	73	41	0
Taree	b	76	51	0·01
T'nt'rfield	-	—	—	—
Wagga....	c	78	44	0·03
Walcha ..	f	66	48	0·22
Walgett ..	b	85	56	0
Wentw'rth	g	89	54	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	74	55	0
Young	c	85	43	0·05

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 21..33·104
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fine; c, cloudy; d, detached clouds, d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn, the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with fresh S.E. winds and smooth sea: cloudy on S. coast, light rain falling, with westerly wind at Albany. Rainfall: Esperance Bay, 0·07.

South Australia reports weather generally dull and gloomy, and raining in parts inland to Charlotte Waters. Winds light and variable in direction from N.E. to N.W. Rain recorded inland to Beltana, but scattered; heaviest, 0·72, at Eucla, 0·32 at Port Augusta, and 0·27 at Crafers. Other stations reporting rain measurements are Streaky Bay, 0·17; Adelaide, 0·18; Robe, 0·04; and M'Donnell Bay, 0·05.

Victoria.—Scattered clouds and foggy on coast, with smooth sea, falling barometers, and light N.E. and N. winds. Inland, Echuca reports dull weather, with fresh W.S.W. wind, and Omeo fine, but cloudy and calm. Rainfall: Melbourne, 0·09; Portland, 0·14; Lake Entrance, 0·23; and Omeo, 0·42.

Tasmania.—Fine and calm on N. coast, no rain.

New Zealand.—Barometers generally 30·20. Wind and weather, Russell, calm and dull; Wellington, S.E., raining; Bluff, S.W., fine and clear.

New South Wales.—Generally fine on coast and in interior; cloudy on mountains; raining steadily at Glen Innes; heavy thunderstorms at Gunnedah and Lismore; raining at Molong; foggy at Walcha; details will be found in map above; heaviest rainfall 1·38, at Inverell; smooth sea, falling barometers, and light westerly winds on coast.

Temora reports dull threatening weather; rain, 0·03.

Queensland.—Generally fine on E. coast; clouds at Cape Moreton and Rockhampton; winds generally S.E., but W. and N.W. at Brisbane and Cape Moreton; sea moderate. Rainfall—Brisbane, 0·01; Cape Moreton, 0·04.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 2, fine but cloudy, overcast, temperature 67°; Cape Otway, E., 2, foggy, half clouded, slight sea, temperature 61°; Portland, N., 2, fine but cloudy, smooth sea, temperature 64°; Wilson's Promontory, N.E., 2, fine but cloudy, overcast, slight sea, temperature 61°.

New South Wales.—Albury, N.W., fine, temperature 66°; Cape St. George, E., 14, fine, smooth sea, temperature 67°; Clarence River, N.E., dull, smooth sea, temperature 70°; Deniliquin, calm, fine, temperature 80°; Dubbo, calm, dull, temperature 69°; Eden, E.N.E., 14, fine, smooth sea, temperature 62°; Goulburn, W., 14, fine, temperature 63°; Menindie, W.S.W., dull, temperature 71°; Moruya, S.W., fine, smooth sea, temperature 65°; Newcastle, N.E., 8, fine, smooth sea, temperature 65°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 74°; Sydney, E., 8, cloudy, smooth sea, temperature 66°; Wentworth, N.W., 42, showery, temperature 61°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 8 feet 6 inches above summer level; at Hay, 5 feet 9 inches above summer level; at Balranald, 6 feet 2 inches above summer level. Murray: At Albury, 11 feet 2 inches above summer level; at Euston, 10 feet above summer level. Darling: At Wentworth, 8 feet 6 inches above summer level; at Menindie, low; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 22.

Sun rises at 5.51, sets at 5.55; Moon, 4.15 p.m., 4.14 a.m.; Mercury, 5.12 a.m., 4.34 p.m.; Venus, 7.28 a.m., 8.47 p.m.; Mars, 3.14 a.m., 1.21 p.m.; Jupiter, 5.27 a.m., 5.3 p.m.; Saturn, 1.28 a.m., 11.24 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 22: 6.41 a.m., 7.4 p.m.

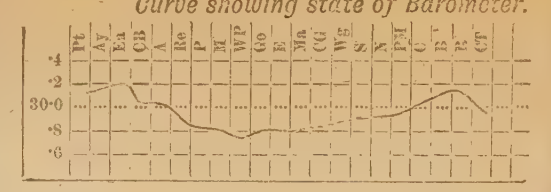
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 22, 1885.

Stations	wt	Mx	Mn	R in
Albury ..	d	76	55	0·14
Armidale	u	72	55	0·20
Balranald	u	84	52	0·08
Bathurst..	p	75	51	0·12
Bend'meer	p	71	56	0·30
Bodalla ..	g	75	50	0·03
Bourke ..	o	92	65	0
Camd'n H.	u	74	60	0
C. St. Geo.	g	68	55	0
Carcoar ..	p	64	54	0·07
Casino	—	—	—	—
Cassilis .	g	71	65	0
Clarence ..	rt	78	66	0·46
Condob'lin	c	67	49	0
Cooma	g	75	46	0·02
Coonab'n.	g	79	54	0·18
Coonamble	u	—	—	0
Cowra	c	69	63	0·10
Deniliquin	p	84	53	0·14
Dubbo ..	c	82	57	0
Eden	u	66	54	0
Euston ..	g	90	52	0·14
Forbes ...	b	73	54	0
Glen Innes	u	64	47	0·81
Goulburn	c	76	49	0
Grafton ..	r	82	59	0·39
Gunnedah	c	81	63	0·05
Hay	c	81	40	0
Hill End	b	—	—	0
Inverell ..	u	69	58	1·23
Mandra ..	r	58	39	0·29
Lismore ..	r	74	52	0·44
Maitland..	u	74	60	0
Marsdens	c	78	62	0
Menindie	u	78	66	0
Molong ..	c	76	55	0·12
Moree	g	88	62	0·10
Moruya ..	g	69	54	0·02
Moss Vale	u	68	50	0
M. Victoria	r	70	50	0·03
Mudgee ..	u	85	50	0
Murrumbh	—	—	—	—
Murr'r'ndi	u	69	46	0
Mus'lbrook	g	85	58	0
Nrrrabri ..	u	98	59	1·09
Newcastle	r	70	53	0
Nowra	g	75	53	0
Orange ..	c	61	50	0·06
Picton	o	75	52	0
P. M'quarie	g	73	58	0
P. Stephens	c	76	61	0
Qu'nbeyan	b	66	54	0
Quirindi ..	u	81	53	0·05
Singleton	u	76	49	0
SYDNEY ..	d	68	57	0
Tamworth	g	78	58	0·25
Taralga ..	g	75	49	0
Taree	c	78	50	0·01
T'nt'rfield	d	69	50	0·28
Wagga....	g	95	53	0·02
Walcha ..	u	71	48	0·19
Walgett ..	b	69	63	0·03
Wentw'rth	g	72	59	0·12
Wilcannia	u	—	—	0
Woll'ng'ng	g	75	57	0
Young	b	85	56	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·808
Total Rainfall from January 1st to September 22..38·135
Barometers corrected to 32 Fah. and Mean Sea Level.

Fine, wind N. — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible] 9 a.m. Mx gives the maximum temperature for previous 24 h[illegible] Mn the corresponding minimum temperature; R in the rain for the previous 24 [illegible] the majority explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Byron Bay; R, Rockhampton; Ct, Cooktown; Menindie, M. Inland the state of barometers is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear on west coast, with light variable winds and smooth sea. Cloudy on S. coast, wind N.E. Rainfall: Albany, 0·11.

South Australia reports weather generally dull inland to Strangeways. Raining on and near coast. Winds generally fresh and varying in direction from W. to S.W. Rain recorded inland to Charlotte Waters, heaviest 1·88 at Mounta. Several stations record over an inch. Moderate sea, rising barometers, and fresh S. wind on coast. Stations reporting rain measurements are—Port Augusta, 0·23; Eucla, 0·09; Streaky Bay, 0·05; Cape Borda, 0·05; Adelaide, 0·56; Robe, 0·09; and M'Donnell Bay, 0·03.

Victoria.—Cloudy and showery on coast, with light W. and N. winds, smooth sea, falling barometers. Dull inland at Echuca, showery at Omeo. Rain reports: Melbourne, 0·20; Portland, 0·02; Cape Otway, 0·33; Wilson's Promontory, 0·30; Lake Entrance, 0·15; Echuca, 0·26; and Omeo, 0·04.

Tasmania.—Light rain falling on N. coast, with light E.N.E. wind. Rainfall: Low Heads, 0·27. Barometer falling.

New Zealand.—Barometers generally 30·20. Weather fine. Winds: Russell calm, Wellington S.E., and Bluff N.W.

New South Wales.—Generally cloudy and unsettled; thunderstorm with light rain at Clarence Heads. Raining on coast north of and at Newcastle, and in places on the highlands of New England; raining also S. at Deniliquin; cloudy all down coast and generally on the mountains and Victorian border, and along the chief river basins. Fine west of the range, near Condobolin and Forbes. (Details in map.) Smooth sea, falling barometers, and light winds and calms on coast. Lawrence reports 0·75 rain fell in half an hour on Sunday; total this morning, 0·84; rain still falling.

Queensland.—Generally cloudy and unsettled, but no rain falling; winds generally N.W. in S. and S.E. at northern stations; sea moderate; rain, Brisbane, 0·01.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, calm, cloudy, temperature 62°; Cape St. George, N., 28, fine, smooth sea, temperature 70°; Clarence River, fine, smooth sea, temperature 72°; Deniliquin, calm, showery, temperature 64°; Eden, E., 14, fine, smooth sea, temperature 63°; Goulburn, N., 14, fine, temperature 65°; Menindie, S.W., showery, temperature 68°; Moruya, N.N.W., 28, fine but cloudy, smooth sea, temperature 60°; Newcastle, E., 8, fine, smooth sea, temperature 71°; Port Macquarie, calm, fine, smooth sea, temperature 76°; Sydney, N.E., 8, cloudy, smooth sea, temperature 71°; Wentworth, N.W., cloudy, temperature 61°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 8 feet 7 inches above summer level; at Hay, 6 feet 10 inches above summer level; at Balranalad, 6 feet above summer level. Murray: At Albury, 10 feet above summer level; at Euston, 10 feet above summer level. Darling: At Wentworth, 8 feet 5 inches above summer level; at Pooncarie, low; at Menindie, 5 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 23.

Sun rises at 5.50, sets at 5.56; Moon, 5.11 p.m., 4.51 a.m.; Mercury, 5.13 a.m., 4.37 p.m.; Venus, 7.28 a.m., 8.49 p.m.; Mars, 3.12 a.m., 1.20 p.m.; Jupiter, 5.23 a.m., 5.0 p.m.; Saturn, 1.24 a.m., 11.20 p.m. New moon, 9th; full moon, 24th.

High water at Port Denison, September 23: 7.26 a.m., 7.45 p.m.

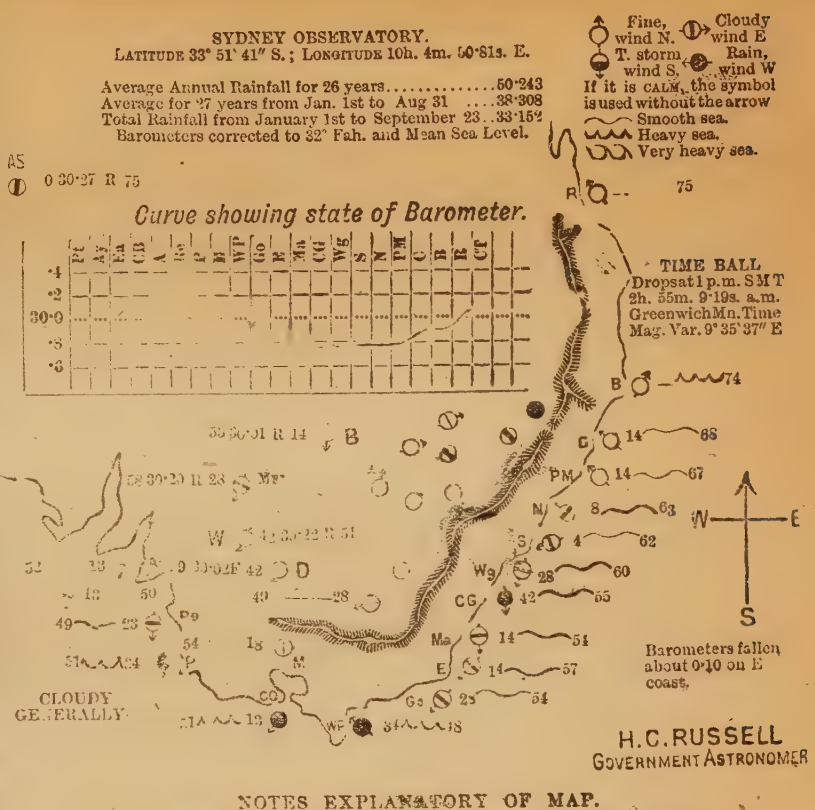
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 23, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	83	46	0·30
Armidale		71	54	0·50
Balranald		71	34	0·10
Bathurst	d	73	51	0·20
Bend'meer	r	71	55	0·[illegible]
Bodalla	r	78	55	0·[illegible]
Bourke	c	96	55	0·14
Camd'n H.	—	—	—	—
C. St. Geo.	r	70	55	0·14
Carcoar	g	63	52	0·52
Casino	—	—	—	—
Cassilis	c	75	57	1·00
Clarence	c	79	63	0·31
Condob'lin	c	5[illegible]	39	0·21
Cooma	g	71	44	0·10
Coonab'n.	q	81	44	0·17
Coonamble	b	—	—	0
Cowra	c	71	61	0·10
Deniliquin	b	78	39	0·10
Dubbo	g	82	53	0·33
Eden	c	71	55	0·10
Euston	b	71	36	0
Forbes	b	74	[illegible]	0
Glen Innes	u	76	51	0·35
Goulburn	b	73	50	0·10
Grafton	b	83	62	0·18
Gunnedah	g	82	59	0·52
Hay	b	76	41	0
Hill End	b	—	—	0·23
Inverell	u	72	56	0·56
Kiandra	g	51	37	0·63
Lismore	b	78	62	0·20
Maitland	p	79	63	0·31
Marsdens	c	65	53	0·[illegible]
Menindie	g	72	50	0
Molong	c	74	53	0·45
Moree	c	92	54	0·18
Moruya	g	69	54	0·07
Moss Vale	c	69	52	0·10
M. Victoria	g	68	48	0·12
Mudgee	u	79	49	0·49
Murrumbidgee	u	73	52	0
Murr'r'ndi	u	71	46	0·35
Mus'lbrook	c	85	56	0·67
Narrabri	u	98	57	0·58
Newcastle	g	75	61	0·37
Nowra	c	77	52	0·15
Orange	g	69	46	0·35
Picton	u	75	55	0·04
P. M'quarie	c	79	59	0·15
P. Stephens	c	77	60	0·40
Qu'nbeyan	b	70	53	0·05
Quirindi	g	79	53	0·19
Singleton	b	80	58	0·[illegible]
Sydney	g	75	61	0·05
Tamworth	g	76	56	0·[illegible]
Taralga	b	69	49	0·42
Tarce	g	80	62	0·01
T'nt'rfield	u	75	54	0·20
Wagga	b	71	46	0·13
Walcha	u	71	48	0·61
Walgett	c	80	57	0·31
Wentw'rth	b	69	46	0
Wilcannia	b	—	—	0
Woll'ng'ng	g	77	60	0·07
Young	u	79	50	0·05

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 23..33·152
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fair, or blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ap, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Ad, Adelaide; P, Portland; M, Melbourne; W P, Wilson's Promontory; Br, Bright; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Esperance Bay reports fine weather, fresh W. wind, thunderstorms in night. Rainfall, 0·08.

South Australia.—Weather generally cloudy inland to Beltana. Dull in parts, showery in south, winds generally fresh and from S.W. to S. in direction. Light rains recorded inland to Port Augusta, heaviest 0·16 at Mount Gambier and over Mount Lofty ranges. Moderate sea and rising barometers on coast. Fine in N. Territory. Rainfall: Port Augusta, 0·02; Eucla, 0·01; Streaky Bay, 0·05; Cape Borda, 0·01; Adelaide, 0·04; Robe, 0·06; and M'Donnell Bay, 0·02.

Victoria.—Generally cloudy and showery on coast, with fresh to strong S.W. winds, falling barometers, and rough sea. Fine inland at Omeo, dull at Echuca. Rainfall: Melbourne, 0·13; Portland, 0·17; Cape Otway, 0·31; Wilson's Promontory, 0·05; Lakes Entrance, 0·72; Omeo, 0·30; and Echuca, 0·07.

Tasmania.—Dull on N. coast, light S.S.E. wind, no rain.

New Zealand.—Fine generally, with barometers 30·20, and winds light from S.

New South Wales.—Weather still cloudy and unsettled, especially on coast and mountains; fine in S.W. (For details see map above.) Smooth sea, cloudy weather, falling barometers, and light to strong S.W. winds on coast. Temora reports rain [illegible], weather dull.

Queensland.—Weather fine and clear, with variable winds [illegible] from S.E. at Cooktown, falling barometers, and smooth sea generally, except off Moreton Bay, where it is rough. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W., 13, dull and showery, temperature 53°; Cape Otway, S.W., 18, raining, high sea, temperature 50°; Portland, S.S.W., 34, showery, high sea, temperature 53°; Wilson's Promontory, W., 28, squally, rough sea.

New South Wales.—Albury, N.W., dull, temperature 58°; Cape St. George, S., 42, fine, smooth sea, temperature 60°; Clarence River, N.W., 56, fine, smooth sea, temperature 81°; Deniliquin, S.W., fine, temperature 70°; Dubbo, S.W., 14, fine, temperature 64°; Eden, S.E., 28, fine, smooth sea, temperature 58°; Forbes, S.W., 28, fine; Goulburn, N.W., fine, temperature 61°; Menindie, S., 28, fine, temperature 61°; Moruya, N.E., 28, fine, smooth sea, temperature 62°; Newcastle, S.W., 28, fine, smooth sea, temperature 73°; Port Macquarie, W.S.W., 28, unsettled, smooth sea, temperature 79°; Sydney, S.W., 18, fine, smooth sea, temperature 70°; Wentworth, S.W., 28, fine, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 1 inch above summer level; at Hay, 7 feet 8 inches above summer level. **Murray:** At Albury, 9 feet 6 inches above summer level; at Euston, 10 feet above summer level. **Darling:** At Wentworth, 8 feet 5 inches above summer level; at Menindie, 4 inches above summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 24.

Sun rises at 5.49, sets at 5.57; Moon, 6.8 p.m., 5.25 a.m.; Mercury, 5.15 a.m., 4.40 p.m.; Venus, 7.27 a.m., 8.50 p.m.; Mars, 3.10 a.m., 1.19 p.m.; Jupiter, 5.20 a.m., 4.57 p.m.; Saturn, 1.20 a.m., 11.17 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 24: 8.4 a.m., 8.23 p.m.

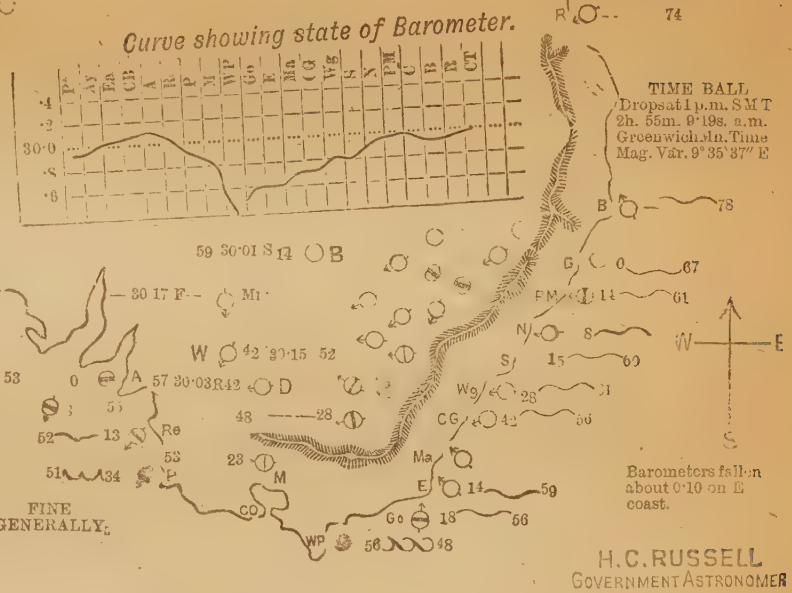
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 24, 1885.

Stations	wt	Mx	m	R'in
Albury ..	u	59	48	0·05
Armidale	b	67	44	0
Balranald	g	68	40	0
Bathurst..	c	58	42	0
Bend'meer	g	68	47	0·01
Bodalla ..	b	69	38	0
Bourke ..	b	85	42	0
Camd'n H.	c	76	51	0
C. St. Geo.	b	64	50	0
Carcoar ..	g	62	51	0
Casino	b	86	45	0
Cassilis .	c	64	46	0
Clarence ..	b	83	55	0
Condob'lin	c	55	39	0
Cooma	g	65	35	0
Coonab'n.	c	72	33	0
Coonamble	b	—	—	0
Cowra	c	60	61	0
Deniliquin	b	78	37	0
Dubbo ..	b	87	38	0
Eden	c	63	43	0·07
Euston ..	c	65	44	0
Forbes ..	u	63	52	
Glen Innes	b	65	41	0
Goulburn	b	60	42	0
Grafton ..	b	88	56	0
Gunnedah	c	73	46	0
Hay	c	68	48	0
Hill End	b	—	—	0
Inverell ..	b	72	42	0
Kiandra ..	r	49	31	0·21
Lismore ..	b	86	53	0
Maitland..	c	80	53	0
Marsdens	c	65	52	0
Menindie	b	63	48	0
Molong ..	c	66	46	0
Moree	c	75	45	0
Moruya ..	b	65	60	0
Moss Vale	b	59	43	0
M. Victoria	b	56	39	0
Mudgee ..	c	69	36	0
Murrumbh	c	67	48	0
Murr'r'ndi	b	66	41	0
Mus'lbrook	b	71	43	0
Nrrrabri ..	u	89	43	0
Newcastle	b	71	52	0
Nowra	b	72	53	0
Orange ..	c	54	41	0
Picton	b	68	48	0
P. M'quarie	c	80	64	0
P.Stephens	g	76	52	0·15
Qu'nbeyan	b	62	46	0
Quirindi ..	g	77	45	0
Singleton	b	80	61	0
SYDNEY ..	b	72	53	0
Tamworth	c	68	40	0
Taralga ..	b	60	41	0
Taree	b	80	50	0
T'nt'rfield	b	71	43	0
Wagga....	u	64	46	0·51
Walcha ..	c	61	39	0
Walgett ..	b	70	45	0
Wentw'rth	c	66	44	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	54	0
Young	u	76	36	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·303
Total Rainfall from January 1st to September 24..33·152
Barometers corrected to 32 Fah. and Mean Sea Level.

Fine, wind N. Cloudy wind E
T. storm wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg.n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt., Perth, Ag., Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with fresh easterly winds and smooth sea. Perth reports weather fine but cloudy. Wind N. No rain.

South Australia reports weather generally fine inland, and dull and threatening on and near coast. Winds light to fresh, and varying in direction from S.W. to S.E. Smooth sea and slightly falling barometers on coast. Fine and calm in Northern Territory. Rainfall—Adelaide, 0·01; Robe, 0·03; M'Donnell Bay, 0·03.

Victoria.—Cloudy and raining on coast, with very rough sea and falling barometers. Barometeric depression off coast in S.E. causing strong westerly and S.W. winds both on coast and inland. Wind very high (56 miles per hour) at Wilson's Promontory, accompanied by heavy showers, and a very high sea. Rainfall—Melbourne, 0·14; Portland, 0·19; Wilson's Promontory, 0·76; Lake Entrance, 0·30; Echuca, 0·17.

Tasmania.—Cloudy and dull on N. coast; barometer 29·16, and falling. Low Heads reports fresh W.S.W. wind, showing barometric depression to be farther south.

New South Wales.—Generally fine with scattered clouds, dull in places on mountains and in S.W.; fresh to strong westerly and N.W. winds prevail over the colony generally, and are evidently traceable to the marked barometric depression off the S.E. coast of Victoria (vide barometer curve above). The weather on the coast is fine and clear, with smooth sea. The barometers N. of Wollongong show a slight rise, but S. of there a fall, increasing as we go south. (Details of weather will be found in map above.)

Queensland.—Generally fine and clear, with N.W. wind at Brisbane, and the usual S.E. and S.W. winds at the more northern stations; sea moderate, no rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers steady; Melbourne, W.S.W., 18, cloudy, temperature 55°; Cape Otway, W., 18, squally with rain, temperature 50°; Portland, S.W., 42, squally with rain, smooth sea, temperature 52°; Wilson's Promontory, W., 56, showery, moderate sea, temperature 48°. At 3 p.m. the barometer at Wilson's Promontory read 29·50, so confirming the very low reading at 9 a.m. A dangerous storm exists to S.E. of Tasmania, which is moving eastward. Heavy gales from W. to S.W. in Tasmania, and on the coast of Victoria.

New South Wales.—Albury, calm, showery, temperature 54°; Cape St. George, W., 42, fine, smooth sea, temperature 67°; Clarence River, N.E., 28, fine, smooth sea, temperature 71°; Dubbo, N.W., fine, temperature 63°; Goulburn, N.W., fine, temperature 57°; Moruya, N.W., 42, fine, smooth sea, temperature 69°; Newcastle, W., fine, smooth sea, temperature 67°; Port Macquarie, N.E., 14, cloudy, smooth sea, temperature 68°; Sydney, W., 12, fine, smooth sea, temperature 72°; Wentworth, W., 28, fine, temperature 58°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 9 inches above summer level; at Hay, 6 feet 11 inches above summer level; at Balranald, 6 feet 4 inches above summer level. Murray: At Albury, 9 feet above summer level; at Euston, 10 feet above summer level. Darling: At Wentworth, 8 feet 4 inches above summer level; at Pooncarie, low; at Menindie, summer level.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 25.

Sun rises at 5.47, sets at 5.58; Moon, 7.7 p.m., 6 a.m.; Mercury, 5.15 a.m., 4.43 p.m.; Venus, 7.27 a.m., 8.52 p.m.; Mars, 3.8 a.m., 1.18 p.m.; Jupiter, 5.16 a.m., 4.54 p.m.; Saturn, 1.17 a.m., 11.13 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 25: 8.4 a.m., 9 p.m.

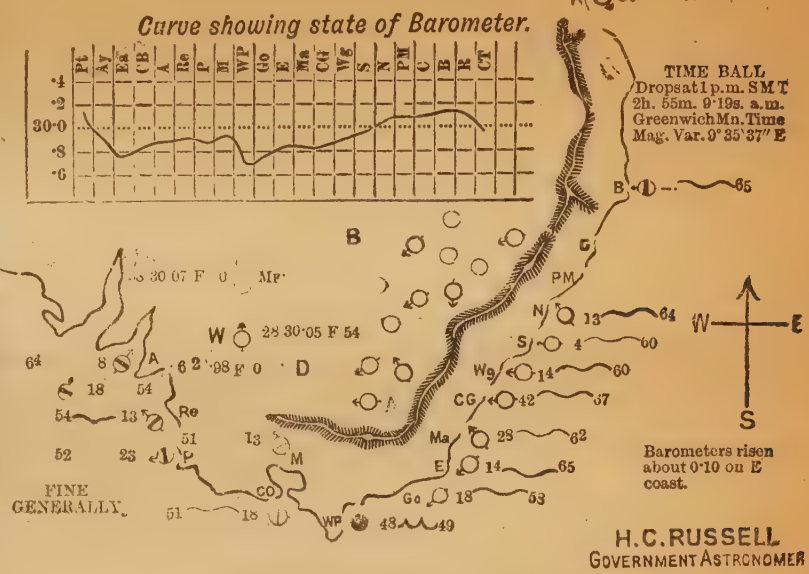
METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 25, 1885.

Stations	wt	Mx	Mn	r'in
Albury ..	b	53	39	0
Armidale	-	—	—	—
Balranald	b	68	29	0
Bathurst..	b	60	33	0
Bend'meer	b	71	35	0
Bodalla ..	b	74	40	0
Bourke ..	-	—	—	—
Camd'n H.	-	—	—	—
C. St. Geo.	o	69	46	0
Carcoar ..	b	57	50	0
Casino	-	—	—	—
Cassilis .	b	64	46	0
Clarence ..	-	—	—	0
Condob'lin	b	55	40	0
Cooma ...	c	60	34	0
Coonab'n.	b	67	32	0
Coonamble	b	—	—	0
Cowra	b	69	58	0
Deniliquin	b	65	36	0
Dubbo ..	b	71	36	0
Eden	c	70	65	0
Euston ..	b	66	40	0
Forbes....	b	—	39	0
Glen Innes	b	65	36	0
Goulburn	b	60	42	0
Grafton ..	-	—	—	—
Gunnedah	b	69	45	0
Hay	b	68	40	0
Hill End	b	—	—	0
Inverell ..	b	63	48	0
Kiandra ..	c	40	29	0·22
Lismore ..	c	83	49	0
Maitland..	b	78	51	0
Marsdens	b	66	47	0
Menindie	b	68	49	0
Molong ..	b	67	38	0
Moree	b	77	45	0
Moruya ..	b	75	48	0
Moss Vale	b	49	41	0
M. Victoria	b	55	38	0
Mudgee ..	b	70	31	0
Murrumbh	c	61	42	0
Murr'r'ndi	b	64	43	0
Mus'lbrook	b	71	43	0
N'rrabri ..	b	92	43	0
Newcastle	b	73	52	0
Nowra	b	71	49	0
Orange ..	b	55	32	0
Picton	b	67	40	0
P. M'quarie	-	—	—	—
P.Stephens	b	75	48	0
Qu'nbeyan	c	57	41	0
Quirindi ..	b	78	45	0
Singleton	b	80	54	0
SYDNEY ..	b	72	51	0
Tamworth	b	63	37	0
Taralga ..	b	57	40	0
Taree	b	74	45	0
T'nt'rfield	-	—	—	—
Wagga....	b	61	36	0
Walcha ..	-	—	—	—
Walgett ..	b	70	45	0
Wentw'rth	b	66	40	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	48	0
Young	b	67	51	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to Aug 31 ....38·308
Total Rainfall from January 1st to September 25..33·152
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy wind E
T. storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea.
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fanding for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty, n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the marg'n. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt., Perth, Ay. Albany; Ea. Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P. Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G. Jervis Bay, Wg. Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light S.W. winds and moderate sea; light rain falling, and squally from S.W., with rough sea at Albany. Rainfall: Geraldton, 0·10; Perth, 0·36; Albany, 0·26; Esperance Bay, 0·06.

South Australia reports weather generally cloudy inland to Peake; raining and dull in places; winds generally light from N.E. to N., but strong between Laura and Alice Springs; moderate sea, falling barometers, and northerly winds on coast; fine in Northern Territory. Rainfall: Tennant's Creek, 0·05.

Victoria.—Generally cloudy on coast, with light westerly winds, steady barometers, and (in places) rough sea; fine, but cloudy, with N.N.W. wind inland at Echuca; fine and clear with light N.E. wind at Omeo. Rainfall: Portland, 0·09; Cape Otway, 0·06; Wilson's Promontory, 0·67; and Lake Entrance, 0·09; no rain measured inland.

Tasmania.—Squally on N. coast; strong W.S.W. wind at Low Heads. Rainfall, 0·16.

New Zealand reports barometers standing generally at 30·40, with light E. winds and calms and fine clear weather.

New South Wales.—Fine and clear throughout colony, with light N.W. to S.W. winds and calms. Smooth sea, rising barometers, and light to fresh westerly winds on coast. (Details in map above.)

Queensland.—Generally fine and clear on E. coast, with light W. wind and calms; sea moderate; dull at Brisbane; foggy at Townsville; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., fine but cloudy, temperature 56°; Cape Otway, W., 13, misty, rough sea, temperature 58°; Portland, N., 28, fine but cloudy, moderate sea, temperature 59°.

New South Wales.—Albury, S.W., dull, temperature 58°; Cape St. George, N.E., 28, fine, smooth sea, temperature 64°; Deniliquin, W., fine, temperature 60°; Dubbo, W., 14, fine, temperature 63°; Eden, N.E., 14, fine, smooth sea, temperature 61°; Goulburn, W., fine, temperature 57°; Menindie, calm, cloudy, temperature 66°; Moruya, N.E., 28, fine, smooth sea, temperature 63°; Newcastle, W., 14, fine, smooth sea, temperature 72.; Port Macquarie, N.E., 28, fine, smooth sea, temperature 72; Sydney N.E., 12, fine, smooth sea; temperature 65; Wentworth, S.W., 14, cloudy, temperature 67°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 10 inches above summer level; at Hay, 7 feet 9 inches above summer level; at Balranald, 6 feet 10 inches above summer level. Murray: At Albury, 9 feet above summer level; at Euston, 10 feet above summer level. Darling: At Wentworth, 8 feet 3inches above summer level; at Pooncarie, low.

ASTRONOMICAL MEMORANDA FOR SEPTEMBER 26.

Sun rises at 5.46, sets at 5.58; Moon, 8.5 p.m., 6·37 a.m.; Mercury, 5.16 a.m., 4.46 p.m.; Venus, 7.26 a.m., 8.54 p.m.; Mars, 3.6 a.m., 1.17 p.m.; Jupiter, 5.13 a.m., 4.51 p.m.; Saturn, 1.13 a.m., 11.9 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 26, 9.19 a.m., 9.37 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 26, 1885.

Stations	wt	Mx	m	R'n
Albury ..	u	60	[illegible]	[illegible]
Armidale	b	65	44	0
Balranald	c	79	48	0·30
Bathurst..	r	64	45	0
Bend'meer	u	67	42	0
Bodalla ..	g	73	39	0
Bourke ..	u	87	63	0
Cand'n H.	-	—	—	—
C. St. Geo.	d	66	47	0·05
Carcoar ..	r	57	51	0·24
Casino	c	84	48	0
Cassilis ..	u	65	53	0
Clarence ..	c	79	51	0
Condob'lin	-	—	—	—
Cooma ...	q	63	38	0
Coonab'n.	d	72	46	0·04
Coonamble	u	—	—	0
Cowra	u	68	59	0·05
Deniliquin	b	70	48	0·46
Dubbo ..	d	76	54	0·08
Eden	u	67	48	0
Euston ...	t	73	54	0·30
Forbes....	p	70	54	0·09
Glen Innes	u	69	38	0
Goulburn	p	65	43	0·25
Grafton ..	u	87	51	0
Gunnedah	g	74	53	0
Hay	b	71	40	0
Hill End	r	—	—	0
Inverell ..	u	66	42	0
Kiandra ..	c	48	35	0·73
Lismore ..	c	83	50	0
Maitland..	u	79	48	0
Marsdens	g	70	51	0·[illegible]
Menindie	-	—	—	—
Molong ..	r	64	51	0·07
Moree	u	82	52	0
Moruya ..	g	71	50	0
Moss Vale	u	54	46	0·09
M. Victoria	u	59	44	0·04
Mudgee ..	u	74	42	0·10
Murrumbh	u	68	50	0·30
Murr'r'ndi	u	66	52	0
Mus'lbrook	g	74	52	0·02
Nrrabri ..	g	96	58	0
Newcastle	g	72	54	0
Nowra	-	—	—	—
Orange ..	r	57	45	0·24
Picton	u	68	46	0·01
P. M'quarie	g	71	46	0
P.Stephens	u	76	52	0
Qu'nbeyan	u	60	47	0·25
Quirindi ..	u	81	50	0
Singleton	g	62	56	0·01
SYDNEY ..	u	71	53	0·15
Tamworth	r	71	44	0
Taralga ..	p	63	49	0·18
Taree	r	66	50	0·02
T'nt'rfield	c	68	44	0
Wagga....	u	60	48	0·52
Walcha ..	o	61	41	0
Walgett ..	u	76	57	0
Wentw'rth	b	70	54	0·18
Wilcannia	b	—	—	0
Woll'ng'ng	g	76	53	0
Young	p	76	49	0·20

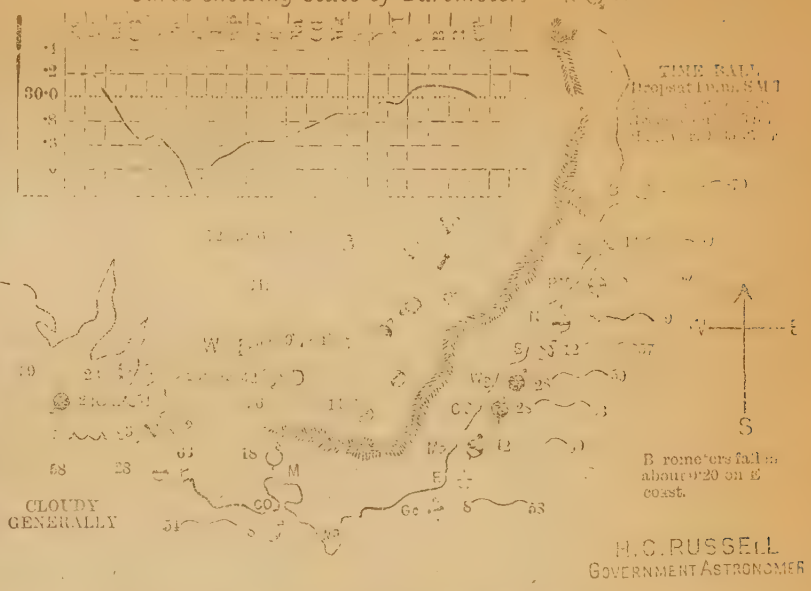
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·0s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 days from Jan. 1st to Aug 31 .....38·368
Total Rainfall from January 1st to September 26...33·306
Barometers corrected to 32 Fah. and Mean Sea Level.

Fine, wind N. — Cloudy wind E. — T. storm wind S. — Rain, wind W. If it is CALM, the symbol is used without the arrow. — Smooth sea. — Heavy sea. — Very heavy sea.

Curve showing state of Barometer.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP

[illegible]

Western Australia.—Cloudy on S. coast, with fresh S.W. wind and rough sea; Fine on W. coast at Perth; rain: Albany, 0·07; Esperance Bay, 0·15; Perth, 0·03.

South Australia reports cloudy, showery weather on coast, with fresh S.W. winds and rough sea; barometers risen slightly since last night; rainfall: Port [illegible] 0·02; Streaky Bay, 0·08; C. Borda, 0·29; Adelaide 0·06; and Robe 0·16.

Victoria.—Cloudy generally, with strong northerly winds, smooth sea and falling barometers; very low barometers off coast (see curve in map); barometric depression apparently off Port [illegible] land; rainfall: Melbourne 0·06; Portland, 0·47; C. [illegible], Echuca, 0.25.

Tasmania.—Dull and raining steadily on N. coast, with S.E. wind; rainfall: Low Head [illegible].

New Zealand. [illegible] Wellington, 30·30; N.W., fine; Bluff, 29·90; F. dull.

New South Wales.—Weather cloudy generally inland, raining on coast, wind fresh and variable; barometer fallen slightly generally; sea smooth. (For particulars as to rain, &c., see map above.)

Queensland.—Weather fine generally, with variable winds, falling barometers, and smooth sea; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, N., 14, cloudy, showery, moderate sea, temperature 54°, barometer 29·30; Portland, S.S.W., 48, cloudy, light rain, smooth sea, temperature 54°, barometer 29·30, and a heavy S.S.W. gale; Wilson's Promontory, W.N.W., 24, [illegible] with rain, moderate sea, temperature 56°, barometer 29·31.

New South Wales.—Albury, S.W., 30, cloudy, temperature 62°; Cape St. George, N. 40, cloudy, moderate sea, temperature 61°; Clarence River, calm, cloudy, smooth sea, temperature 7[illegible]; Dubbo, N., cloudy, raining, temperature [illegible]; Eden, N.W., 29, fine, little sea, temperature 67; Goulburn, N.W., 10, cloudy, temperature 59°; Menindie, N.W., 14, fine, temperature 69°; [illegible], N.W., 42, fine, moderate sea, temperature 70°; Newcastle, N.W., 10, cloudy, smooth sea, temperature 61°; Port Macquarie, N., 14, cloudy, smooth sea, temperature 62; Sydney, N. 15, fine, temperature 65°; Wentworth, N.W., 30, fine, temperature 63°; South Head, fresh N. wind, raining.

[illegible] RIVERS.

Murrumbidgee: At Wagga, 7 feet 9 inches above summer level; at Hay, 9 feet 4 inches above summer level; at Balranald, 7 feet 9 inches above summer level. Murray: At Albury, 8 feet 10 inches above summer level. Darling: At Wentworth, 8 feet 3 inches above summer level; at Wilcannia, low; at Bourke, low.

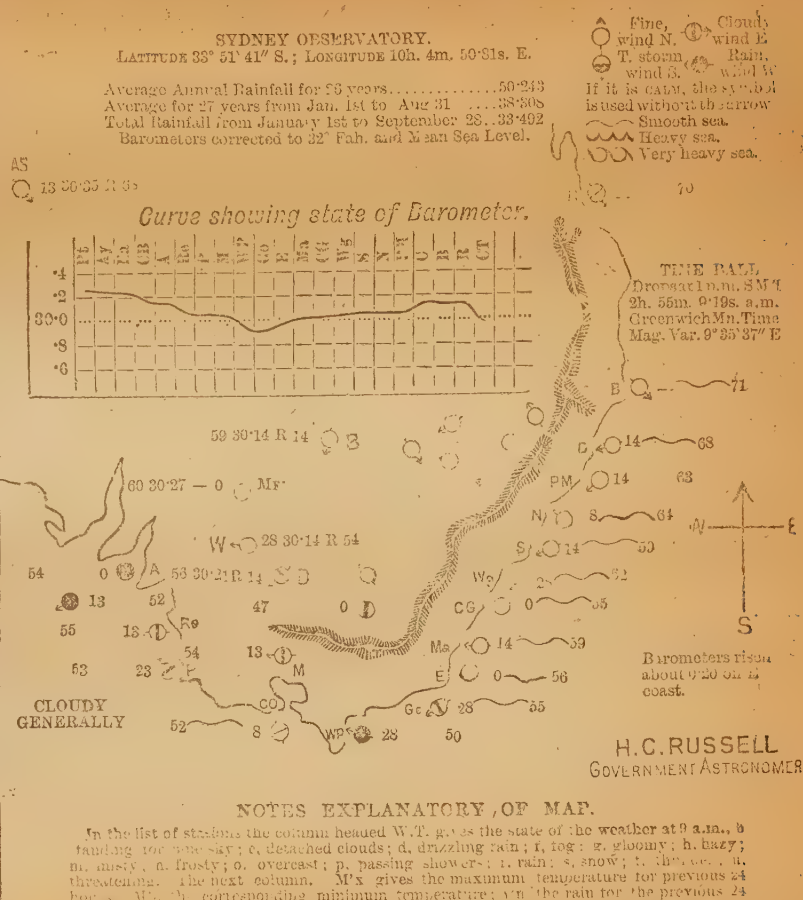
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 29.

Sun rises at 5.43, sets at 5.59; Moon, 10.3 p.m., 7.55 a.m.; Mercury, 5.17 a.m., 4.33 p.m.; Venus, 7.25 a.m., 8.57 p.m.; Mars, 3.2 a.m., 1.16 p.m.; Jupiter, 5.6 a.m., 4.46 p.m.; Saturn, 1.6 a.m., 11.2 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 28, 10.24 a.m., 10.55 p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 28, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	g	68	40	0·04
Armidale	b	68	44	0·02
Balranald	g	72	37	0
Bathurst..	u	60	38	0·96
Bend'meer	b	67	40	0
Bodalla ..	b	79	36	0
Bourke ..	b	77	47	0·49
Camd'n H.	b	71	57	0
C. St. Geo.	b	69	46	0
Carcoar ..	u	59	48	0·87
Casino	b	85	50	0
Cassilis ..	b	61	52	0·35
Clarence ..	b	83	57	0
Condob'lin	–	–	–	—
Cooma	b	62	27	0
Coonab'n.	b	70	37	0·36
Coonamble	b	—	—	0·25
Cowra	b	68	59	0·36
Deniliquin	g	69	36	0
Dubbo ..	b	71	42	0
Eden	c	75	58	0
Euston ..	u	68	41	0
Forbes....	b	63	42	0·64
Glen Innes	b	60	35	0·23
Goulburn	b	60	37	0·04
Grafton ..	b	84	49	0
Gunnedah	b	74	48	0
Hay	c	67	46	0
Hill End	b	—	—	0·67
Inverell ..	f	69	46	0
Kiandra ..	c	48	32	0·33
Lismore ..	b	81	55	0
Maitland..	b	79	52	0
Marsdens	c	69	46	0·05
Menindie	b	67	48	0
Molong ..	b	66	51	0·93
Moree	b	70	45	0
Moruya ..	b	75	45	0
Moss Vale	b	49	40	0
M. Victoria	b	57	38	0·50
Mudgee ..	b	70	39	1·08
Murrumbh	–	–	–	—
Murr'r'ndi	b	68	44	0·70
Mus'lbrook	b	75	47	0·48
Nrrrabri ..	b	98	46	0
Newcastle	b	74	59	0
Nowra	–	–	–	—
Orange ..	b	59	36	0·08
Picton	b	68	41	0·49
P. M'quarie	b	77	50	0
P.Stephens	b	79	52	0
Qu'nbeyan	b	59	40	0·40
Quirindi ..	b	72	54	0·37
Singleton	b	73	55	0·42
SYDNEY ..	b	71	52	0·19
Tamworth	g	67	54	0·13
Taralga ..	g	53	40	0·20
Taree	b	78	53	0·03
T'nt'rfield	c	80	42	0·09
Wagga....	b	75	38	0·05
Walcha ..	b	60	41	0.10
Walgett ..	b	73	47	0
Wentw'rth	c	66	42	0
Wilcannia	b	–	–	0
Woll'ng'ng	b	74	69	0
Young	b	67	35	0·03



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b fanding for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; o, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. Mn. the corresponding minimum temperature; rain the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; then, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown; Menindie, Mf. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning in Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine generally, with light westerly winds on S. Coast, and S.E. to E. on west; sea smooth; no rain.

South Australia.—Generally fine, with scattered clouds inland; showery and dull on and near coast; winds N.W. to S.W.; light rain recorded inland to Quorn; heaviest 1·14, at Narridy; 0·67 at Macclesfield; moderate sea, rising barometers, and light W. winds on coast; rainfall: Streaky Bay, 0·32; C. Borda, 0.05; Adelaide, 0·33; Robe, 0·54.

Victoria.—Cloudy and unsettled; moderate sea rising barometers, and light westerly winds on coast; dull inland, with W. wind at Echuca, and N. at Omeo; rainfall: Melbourne, 0·50; Portland, 1·37; C. Otway, 0.05; Wilsons, 0·86; Lake Entrance, 0·32; Omeo, 0·02.

Tasmania.—Fine on N. Coast, with fresh W. Wind; rainfall: 0·49.

New Zealand.—Russell, barometer, 30·40; wind, N.W., 34, dull; Wellington, barometer, 30·00; wind, N.W., 34; rain: 0.36; Bluff, barometer, 29·50; wind, N., dull. Barometric depression passing over S. Island, evidently that reported off Victorian Coast on 24th.

New South Wales.—Generally fine and clear throughout, with light winds and calms; smooth sea, rising barometers, and light S.W. winds and calms on coast. Rainfall, &c., in map above. Camden reports fall since 26th, 0·75.

Queensland.—Weather on E. coast generally fine, but cloudy, with light W. and S.E. winds and moderate sea. Rainfall: Brisbane, 0·22; Cape Moreton, 0·29; Rockhampton, 0·71.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.W., 13, fine, temperature 60°; Cape Otway, W., 13, cloudy, misty, rough sea, temperature 59°; Portland, W., 24, fine, smooth sea, temperature 57°; Wilson's Promontory, W.N.W., 28, squally from W., moderate sea, temperature 55°.

New South Wales.—Albury, S.W., 42, cloudy, temperature 58°; Cape St. George, E.N.E., 28, fine, smooth sea, temperature 63°; Deniliquin, calm, cloudy, temperature 57°; Dubbo, S.W., fine, temperature 52°; Eden, E., 14, fine, smooth sea, temperature 59; Goulburn, N.W., 14, fine, temperature 58°; Menindie, calm, fine, temperature 64°; Moruya, N.E., 42, fine, smooth sea, temperature 66°; Newcastle, S.E., 14, fine, smooth sea, temperature 67°; Port Macquarie, S.E., 28, fine, smooth sea, temperature 72°; Sydney, E., 12, fine, smooth sea, temperature 63°; Wentworth, calm, cloudy, temperature 59°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 3 inches above summer level; at Hay, 9 feet 11 inches above summer level; at Balranald, 9 feet 5 inches above summer level. Murray: At Albury, 9 feet 4 inches above summer level; at Euston, 10 feet 3 inches above summer level; at Pooncarie, low; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

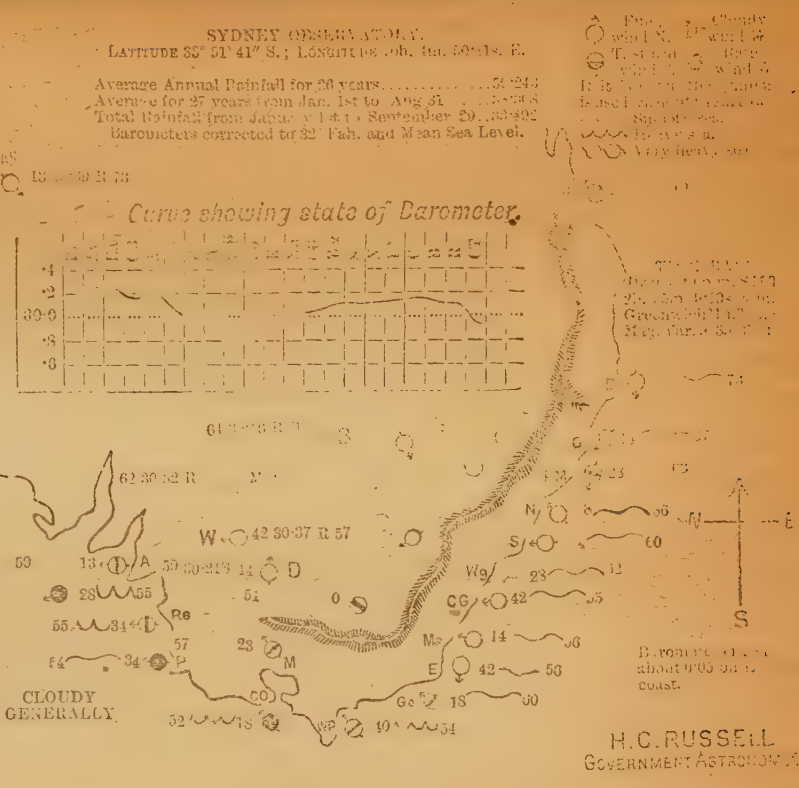
ASTRONOMICAL MEMORANDA FOR SEPTEMBER 29.

Sun rises at 5.42, sets at 6.0; Moon, 11.9 p.m., 8·42 a.m.; Mercury, 5.18 a.m., 4.57 p.m.; Venus, 7.25 a.m., 8.59 p.m.; Mars, 3.3 a.m., 1.15 p.m.; Jupiter, 5.3 a.m., 4.43 p.m.; Saturn, 1.2 a.m., 10.58 p.m. New moon, 9th; full moon, 24th.

High water at Fort Denison, September 29, 11.15 a.m., 11.37 p.m

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 29, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	c	63	45	0
Armidale	b	69	40	0
Balranald	b	71	37	0
Bathurst..	b	59	32	0
Bend'meer	b	70	36	0
Bodalla ..	b	71	54	0
Bourke ..	b	77	46	0
Camd'n H.	c	71	54	0
C. St. Geo.	b	64	44	0
Carcoar ..	b	55	[illegible]	0
Casino	b	85	42	0
Cassilis .	b	64	45	0
Clarence ..	b	87	55	0
Condob'lin	b	56	35	0
Cooma	n	69	26	0
Coonab'n.	b	73	[illegible]	0
Coonamble	b	—	—	0
Cowra	b	63	58	0
Deniliquin	b	70	35	0
Dubbo ..	b	71	39	0
Eden	b	74	57	0
Euston ..	b	73	36	0
Forbes ...	b	61	40	0
Glen Innes	b	57	45	0
Goulburn	b	62	35	0
Grafton ..	b	90	51	0
Gunnedah	b	74	45	0
Hay	b	64	44	0
Hill End	b	—	—	0
Invere'l ..	b	65	42	0
Kiandra ..	c	48	31	0·07
Lismore ..	b	84	52	0
Maitland..	b	78	45	0
Marsdens	c	66	48	0
Menindie	b	71	53	0
Molong ..	b	63	38	0
Moree	b	80	47	0
Moruya ..	b	73	48	0·40
Moss Vale	b	50	37	0
M. Victoria	b	58	37	0
Mudgee ..	b	71	32	0
Murrumbh	b	63	41	0
Murr'r'ndi	b	66	45	0
Mus'lbrook	b	71	40	0
Nrrrabri ..	b	97	46	0
Newcastle	b	74	50	0
Nowra	—	—	—	—
Orange ..	b	56	33	0
Picton	b	[illegible]	57	0
P. M'quarie	b	69	50	0
P.Stephens	b	77	49	0
Qu'nbeyan	b	59	38	0
Quirindi ..	b	79	45	0
Singleton	b	71	47	0
SYDNEY	b	70	48	0
Tamworth	b	69	39	0
Taralga ..	b	61	34	0
Taree	b	78	52	0
T'nt'rfield	b	70	39	0
Wagga....	b	74	[illegible]	0
Walcha ..	n	[illegible]	35	0
Walgett ..	b	74	44	0
Wentw'rth	b	71	43	0
Wilcannia	b	—	—	0
Woll'ng'ng	b	73	54	0
Young	b	74	34	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., [illegible] detached clouds; d, drizzling rain; f, fog; [illegible] cloudy; h, hazy; [illegible] misty; [illegible] overcast; p, passing showers; r, rain; s, snow; [illegible] smooth; [illegible] threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature. [illegible] rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each [illegible] station the wind is shown by a vane pointing to the direction from which the wind blows. A clear circle with [illegible] means fine weather; a circle with [illegible] cloudy; and a black circle, raining. Next to this symbol are placed figures denoting the number of miles the wind is blowing per hour; next to a station [illegible] the state of the sea, according to the scale given in the margin. [illegible] Forbes, Ay, Armidale, Ba, Bathurst, [illegible] M, Melbourne, W.P., Wilson's Promontory, [illegible] Bay, Wg, Wollongong, [illegible] River, B, Bourke, [illegible] barometer is given in figures at Albury, [illegible] Hill, Ay, Armidale, Bathurst, [illegible] Springs. The barometer curve indicates the [illegible] beginning in Western [illegible] and continuing thence eastward [illegible] and finally [illegible].

Western Australia.—Cloudy, with light variable winds and smooth sea.

South Australia.—Generally cloudy south of Port Augusta, raining over Mount Lofty Ranges, squally in parts on coast from N.W. to S.W.; light rain recorded inland to Quorn, but scattered, heaviest at Watervale; in north, 0·13 at Lucindale, and in south 0·47; rough sea, strong W. winds, and steady barometers on coast. Rainfall: C. Borda, 0·02; Adelaide, 0·01; Robe, 0·06; M'Donnell Bay, 0·03.

Victoria: Cloudy and showery on coast, with strong N.W. winds, falling barometers, and rough sea; cloudy inland at Omeo and Echuca, with strong N.W. winds. Portland, 0·16; C. Otway, 0.01; Wilson's Promontory, 0·25.

Tasmania.—Light rain on N. Coast, N.W. wind. Rainfall: Low Heads, 0·07.

New Zealand.—Russell, barometer 30·30; wind N.W., 28, showery; Wellington, barometer 29·90, wind N.W., 28, heavy rain, 0·45, in night; Bluff, barometer 29·80, wind S.W., passing showers.

New South Wales.—Fine and clear throughout colony, with light S.W. to N.W. winds and calms; smooth sea and rising barometers on coast. Details in map above.

Queensland.—Generally fine, with light variable winds and calm. Sea moderate. Clouds at Cape Moreton and Rockhampton. Rainfall: Rockhampton, 0·01.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.W., 12, cloudy, with rain, temperature 58°; Cape Otway, W., 18, squally, with rain, high sea, temperature 54°; Portland, W., 48, squally, with rain, smooth sea, temperature 55°; Wilson's Promontory, N.W., 14, cloudy, [illegible] sea, temperature 56°.

New South Wales.—Albury, S.W., 12, cloudy, temperature 58°; Cape St. George, S.E., 28, fine, smooth sea, temperature [illegible]; Clarence River, N.E., 14, fine, smooth sea, temperature [illegible]; Deniliquin, calm, 0, fine, temperature 59°; Dubbo, [illegible] temperature 63°; Goulburn, N.W., [illegible] temperature [illegible]; Moruya, W.S.W., 42, fine, smooth sea, temperature [illegible]; Newcastle, W., 14, fine, smooth sea, temperature [illegible]; Port Macquarie, S.E., 26, fine, smooth sea, temperature 70°; Sydney, W., [illegible], smooth sea, temperature 72°; Wentworth, W., [illegible] temperature 62°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, [illegible] feet [illegible] at Hay, 9 feet 9 inches [illegible] feet 3 inches above summer level. At Balranald [illegible] 6 inches above summer level, [illegible] 36 [illegible] summer level. Darling: At Wentworth, 5 feet [illegible] above summer level; at Pooncarie, low; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

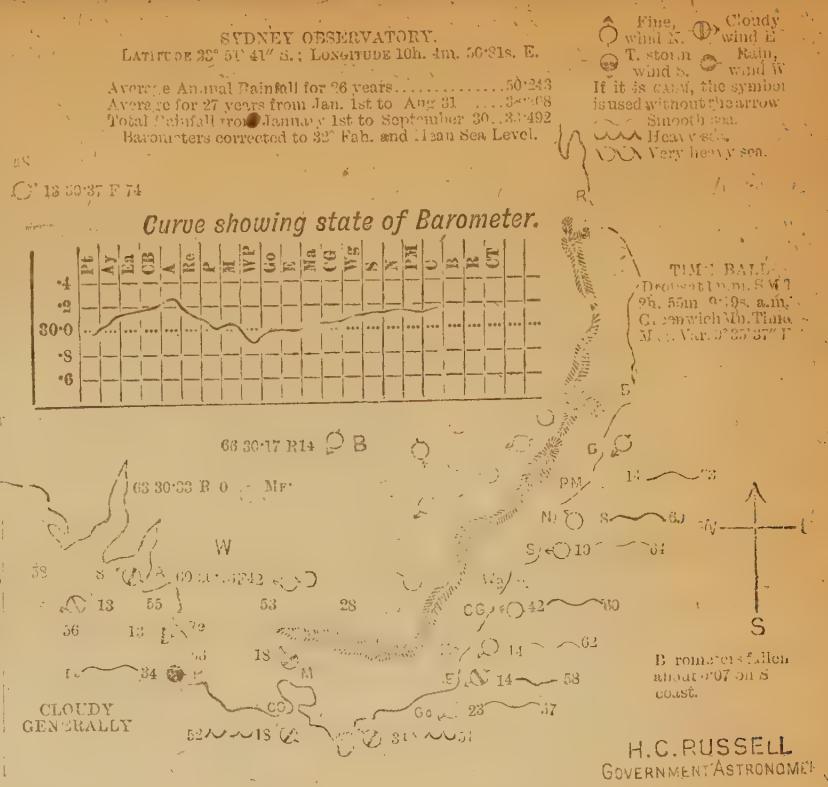
ASTRONOMICAL MOVEMENTS FOR [illegible] SEPTEMBER 30.

Sun rises at 5.10, sets at 6.0; Moon, —, [illegible]; Mercury, 5.19 a.m., 5.1 p.m.; Venus, 7.24 a.m., [illegible]; Mars, 2.58 a.m., 1.14 p.m.; Jupiter, 5.0 a.m., 4.40 p.m.; [illegible], 12.38 a.m., 10.54 p.m. New moon, 4th; full moon, 24th.

High water at Port Denison, September 30, [illegible] a.m. [illegible] p.m.

METEOROLOGICAL REPORTS AND MAP FOR SEPTEMBER 30, 188

Stations	Wt	Mx	Mn	R'in
Albury ..	b	67	48	0
Armidale	b	70	46	0
Balranald	b	76	38	0
Bathurst ..	c	61	38	0
Bend'meer	n	68	34	0
Bodalla ..	b	77	61	0
Bourke ..	b	80	46	0
Camd'n H.	b	69	50	0
C. St. Geo.	b	72	50	0
Carcoar ..	b	57	48	0
Casino	b	86	45	0
Cassilis .	b	65	46	0
Clarence ..	b	82	56	0
Condob'lin	b	57	38	0
Cooma	u	62	31	0
Coonab'n.	b	71	35	0
Coonamble	b	—	—	0
Cowra	b	64	58	0
Deniliquin	b	76	38	0
Dubbo ..	b	74	38	0
Eden	c	67	52	0
Euston ..	c	73	38	0
Forbes ..	b	69	43	0
Glen Innes	b	67	35	0
Goulburn	b	63	43	0
Grafton ..	b	92	51	0
Gunnedah	b	73	46	0
Hay	b	69	44	0
Hill End	b	—	—	0
Inverell ..	b	67	38	0
Kiandra ..	c	46	30	0·10
Lismore ..	b	83	55	0
Maitland ..	b	71	47	0
Marsdens	b	71	51	0
Menindie	b	74	52	0
Molong ..	b	70	40	0
Moree	b	71	45	0
Moruya ..	b	73	47	0
Moss Vale	b	55	44	0
M. Victoria	b	55	37	0
Mudgee ...	b	75	34	0
Murrumbh	b	68	45	0
Murr'r'ndi	b	66	44	0
Nus'lbrook	b	74	43	0
Nrrrabri ..	b	96	43	0
Newcastle	b	72	52	0
Nowra	—	—	—	—
Orange ..	c	58	39	0
Picton	b	68	43	0
P. M'quarie	b	69	47	0
P.Stephens	b	79	51	0
Qu'nbeyan	b	61	48	0
Quirindi ..	b	78	45	0
Singleton	b	63	45	0
SYDNEY ..	b	73	54	0
Tamworth	b	68	37	0
Taralga ..	b	61	44	0
Taree	b	78	47	0
T'nt'rfield	b	72	34	0
Wagga.....	b	68	44	0
Walcha ..	b	64	34	0
Walgett ..	b	78	47	0
Wentw'rth	—	—	—	—
Wilcannia	b	—	—	0
Woll'ng'ng	b	75	50	0
Young	b	75	38	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, but no rain either falling or recorded; winds light from E. and S., sea smooth.

South Australia reports weather generally dull S. of Burra, showery in parts; winds generally fresh from S.W. to N.W., and strong from E. and N.E. west of Port Lincoln; moderate sea, light westerly winds, and falling barometers on S. coast. Rainfall—Robe, 0·02; M'Donnell Bay, 0·03.

Victoria.—Generally cloudy, with strong westerly winds, falling barometers, and rough sea on coast; cloudy inland at Echuca, fine and calm at Omeo. Rainfall—Melbourne, 0·07; Portland, 0·12; Cape Otway, 0·1[illegible]; Wilson's, 0·12; Lake Entrance, 0·12.

Tasmania.—Showery on N. coast, fresh W. wind. Rainfall—Low Heads, 0·22.

New Zealand.—Russell, barometer 30·20, wind N.W., 28, showery; Wellington, barometer 29·90, wind N.W., fine; Pilot, barometer 29·50, wind N., 24, passing showers.

New South Wales.—Generally fine and clear, with light S.W. to N.W. winds and calms; smooth sea, steady barometers, and light westerly winds on coast; Kiandra reports 0·10 rain; no other station reports any.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., dull, temperature 60°; Cape St. George, W., 42, fine, smooth sea, temperature 73°; Deniliquin, W., fine, temperature 71°; Dubbo, W., fine, temperature 67° Eden, N.E., fine, smooth sea, temperature 66°; Menindie, calm fine, temperature 64°; Moruya, W.N.W., 29, fine, moderate sea temperature 58°; Newcastle, N.W., 8, fine, smooth sea, temperature 73°; Port Macquarie, E., 28, fine, smooth sea, temperature 73°; Sydney, E., 8, fine, smooth sea, temperature 69°; Wentworth, N.W., 14, fine, temperature 72°.

Victoria.—Melbourne, W., 18, showery, temperature 56°; Cape Otway, W., 18, showery, high sea, temperature 54°; Portland, W., 48, cloudy, squally, slight sea, temperature 56°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 8 feet 9 inches above summer level; at Hay, 9 feet above summer level; at Balranald, 9 feet 6 inches above summer level. Murray: At Albury, 9 feet above summer level; at Euston, 10 feet 8 inches above summer level. Darling At Pooncarie, low; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

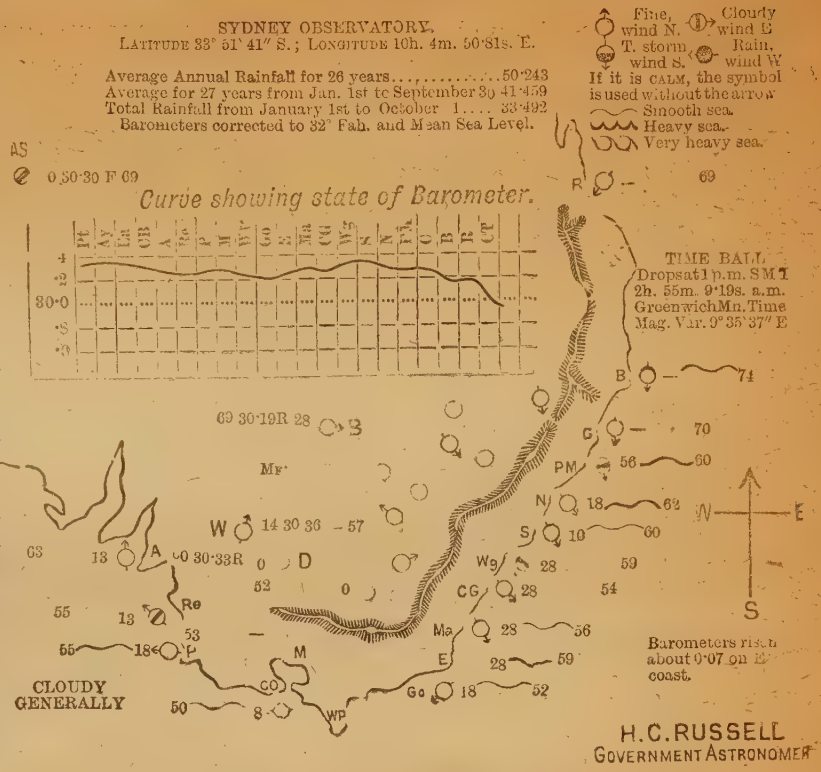
ASTRONOMICAL MEMORANDA FOR OCTOBER 1.

Sun rises at 5.39, sets at 6.1; Moon, 12.8 a.m. 10.26 a.m. Mercury, 5.19 a.m., 5.5 p.m.; Venus, 7.24 a.m., 9.4 p.m. Mars, 2.56 a.m., 1.12 p.m.; Jupiter, 4.56 a.m., 4.36 p.m.; Saturn, 12.54 a.m., 10.50 p.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 1: 12.25 a.m., 12.50 p.m

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 1, 1885.

Stations	wt	Mx	Mn	R'in
Albury ..	b	65	42	0
Armidale	b	67	45	0
Balranald	b	78	38	0
Bathurst..	b	66	39	0
Bend'meer	b	70	39	0
Bodalla ..	b	79	38	0
Bourke ..	b	85	49	0
Camd'n H.	u	72	55	0
C. St. Geo.	c	69	52	0
Carcoar ..	b	59	44	0
Casino	b	85	44	0
Cassilis ..	b	68	46	0
Clarence ..	c	87	54	0
Condob'lin	b	60	39	0
Cooma	c	68	38	0
Coonab'n.	b	76	38	0
Coonamble	b	—	—	0
Cowra	b	65	59	0
Deniliquin	b	71	36	0
Dubbo ..	–	—	—	—
Eden	b	65	48	0
Euston ..	b	74	63	0
Forbes ...	b	73	43	0
Glen Innes	b	75	46	0
Goulburn	b	66	37	0
Grafton ..	b	92	51	0
Gunnedah	b	78	50	0
Hay	b	78	44	0
Hill End	b	—	—	0
Inverell ..	b	68	42	0
Kiandra ..	n	51	30	0·05
Lismore ..	b	85	58	0
Maitland..	b	76	52	0
Marsdens	b	75	51	0
Menindie	u	—	—	0
Molong ..	g	71	40	0
Moree	b	85	47	0
Moruya ..	b	77	47	0
Moss Vale	b	—	—	0
M. Victoria	b	63	38	0
Mudgee ..	b	71	39	0
Murrumbh	b	74	46	0
Murr'r'ndi	b	70	48	0
Mus'lb'rook	g	73	43	0
Narrabri ..	b	92	47	0
Newcastle	c	76	48	0
Nowra	g	79	54	0
Orange ..	b	59	38	0
Picton	u	73	49	0
P. M'quarie	g	72	46	0
P.Stephens	c	72	51	0
Qu'nbeyan	b	63	43	0
Quirindi ..	b	83	48	0
Singleton	b	75	55	0
SYDNEY ..	g	78	56	0
Tamworth	b	72	40	0
Taralga ..	b	66	36	0
Taree	c	81	49	0
T'nt'rfield	b	70	43	0
Wagga....	b	71	41	0
Walcha ..	b	66	54	0
Walgett .	–	—	—	—
Wentw'rth	b	73	45	0
Wilcannia	b	—	—	0
Woll'ng'ng	c	78	57	0
Young	b	81	44	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h. hazy; m, misty; n. frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n. the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong, S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy in S., winds S. and E., sea smooth, thunderstorms at Esperance Bay; no rain.

South Australia reports weather generally fine, scattered clouds on coast and in S.E.; dull and gloomy between Fowler and Streaky Bay; winds light from N.; smooth sea and falling barometers on coast; no rain.

Victoria.—Generally fine and clear; smooth sea, steady barometers, and light westerly winds on coast; S.W. winds, and calm inland. Wilson's Promontory (not in map), W., 13, fine, barometer 30·18, temperature 49·, rainfall 0·20. Rainfall: Melbourne, 0·05; Portland, 0·11; Cape Otway, 0·12; Lake Entrance, 0·8.

Tasmania.—Hazy on N. coast, fresh wind. Rainfall: Low Heads, 0·36.

New Zealand.—Russell, barometer 30·00, wind N.W., dull; Wellington, barometer 29·70, wind N.W., fine; Bluff, barometer 29·50, wind N.W., dull.

New South Wales.—Fine and clear throughout, with light S.W. to S.E. winds and calms; smooth sea, and rising barometers on coast.

Queensland.—Fine and clear throughout, with light S. winds and moderate sea; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W., 8, cloudy, temperature 62·; Cape Otway, N.W., 8, misty, moderate sea, temperature 59·; Portland, W., 28, fine, but cloudy, smooth sea, temperature 59·; Wilson's Promontory, E.S.E., 18, fine, but cloudy, smooth sea, temperature 54.

New South Wales.—Albury, N.E., fine, temperature 62·; Cape St. George, E.S.E., 28, fine, moderate sea, temperature 62·; Goulburn, N.W., fine, temperature 61·; Moruya, N.E., 42, hazy, smooth sea, temperature 60·; Newcastle, S.E., 28, fine, moderate sea, temperature 63·; Port Macquarie, S.S.E., 42, cloudy, smooth sea, temperature 68·; Sydney, E., 12, fine, smooth sea, temperature 61·.

STATE OF RIVERS.

Murrumbidgee: At Hay, 8 feet above summer level; at Balranald, 9 feet 8 inches above summer level. Murray: At Albury, 8 feet 11 inches above summer level; at Euston, 10 feet 9 inches above summer level. Darling: At Wentworth, 8 feet 6 inches above summer level; at Wilcannia, low; at Bourke, low.

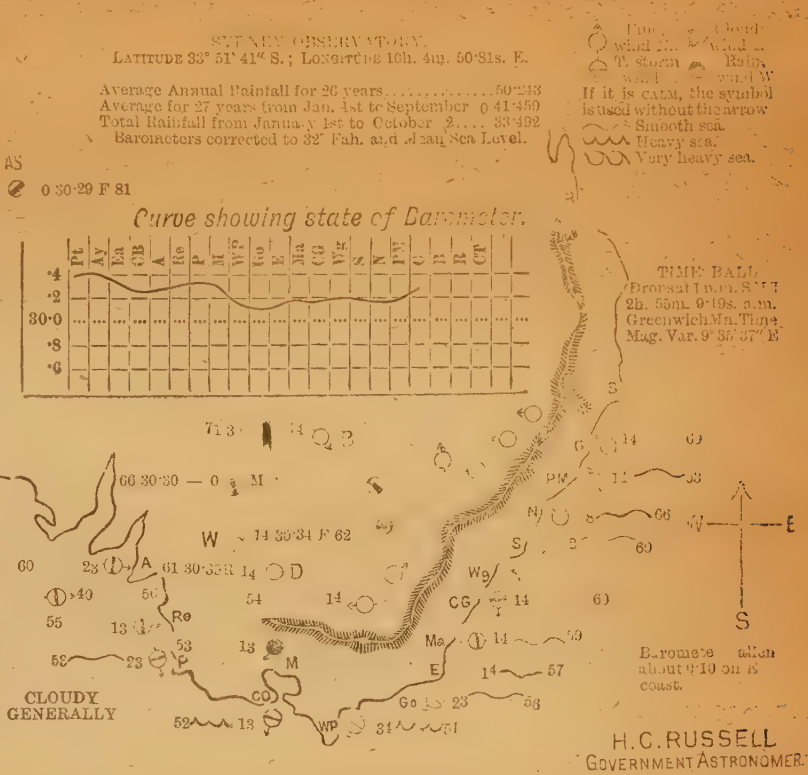
ASTRONOMICAL MEMORANDA FOR OCTOBER 1.

Sun rises at 5.38, sets at 6.2; Moon, 1.4 a.m, 11.24 a.m.; Mercury, 5.19 a.m., 5.9 p.m.; Venus, 7.24 a.m., 9.6 p.m.; Mars, 2.54 a.m., 1.11 p.m.; Jupiter, 4.53 a.m., 4.33 p.m.; Saturn, 12.50 a.m., 10.46 p.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 2: 1.21 a.m., 1.52 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 2, 1885.

Stations	wt	Mx	m	r'n
Albury ..	b	69	46	0
Armidale	b	69	44	0
Balranald	–	—	—	—
Bathurst..	g	72	38	0
Bend'meer	b	72	36	0
Bodalla ..	b	67	39	0
Bourke ..	b	88	50	0
Camd'n H.	h	65	52	0
C. St. Geo.	c	64	50	0
Carcoar ..	g	62	48	0
Casino	b	74	48	0
Cassilis ..	b	67	46	0
Clarence ..	c	79	59	0
Condob'lin	g	60	41	0
Cooma....	c	73	39	0
Coonab'n.	b	81	34	0
Coonamble	b	—	—	0
Cowra	b	68	60	0
Deniliquin	b	72	44	0
Dubbo ..	b	80	42	0
Eden	b	60	47	0
Euston ..	c	83	52	0
Forbes....	b	71	42	0
Glen Innes	c	63	44	0
Goulburn	g	74	44	0
Grafton ..	b	79	57	0
Gunnedah	b	80	48	0
Hay	g	75	51	0
Hill End	b	—	—	0
Inverell ..	b	72	44	0
Kiandra ..	b	55	33	0
Lismore ..	b	76	58	0
Maitland..	c	79	45	0
Marsdens	c	77	52	0
Menindie	u	80	59	0
Molong ..	b	74	45	0
Moree	–	—	—	—
Moruya ..	c	62	46	0
Moss Vale	–	—	—	—
M. Victoria	g	68	45	0
Mudgee ..	b	80	36	0
Murrumbh	b	74	44	0
Murr'r'ndi	b	71	45	0
Mus'lbrook	b	74	42	0
Narrabri ..	b	90	44	0
Newcastle	c	68	50	0
Nowra	–	—	—	—
Orange ..	g	61	40	0
Picton	u	67	40	0
P. M'quarie	b	67	46	0
P.Stephens	c	73	40	0
Qu'nbeyan	b	63	47	0
Quirindi ..	b	88	47	0
Singleton	b	70	51	0
SYDNEY ..	g	64	49	0
Tamworth	b	75	40	0
Taralga ..	u	72	45	0
Taree	b	69	48	0
T'nt'rfield	b	74	43	0
Wagga....	b	76	42	0
Walcha ..	b	69	35	0
Walgett ..	b	80	48	0
Wentw'rth	g	81	58	0
Wilcannia	c		—	0
Woll'ng'ng	g	71	43	0
Young	g	79	42	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind blows coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown.—Pt, Perth; Ay, Albany; Ba, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne, WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG Jervis Bay; Wg, Wollongong, S, Sydney, N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton, Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally cloudy and dull inland to Peake; winds fresh from S.E. and N.E.; light rain recorded on coast and in S.E.; heaviest 0·36, at Lucindale; moderate sea, steady barometers, and strong easterly winds on coast; thunder-storms and showers in night west of Port Lincoln. Rainfall: Eucla, 0·02; Borda, 0·14; Streaky Bay, 0·02; Robe, 0·32. Fine in Northern Territory.

Western Australia.—Generally fine and clear, with light S.E. winds and smooth sea. Rainfall: Esperance Bay, 0·02, with dull weather.

Victoria.—Generally cloudy and dull; passing showers at Melbourne; rough sea, strong southerly winds, and rising barometers on coast; fine inland at Echuca, with strong W. wind. Rainfall: Melbourne, 0·10; Wilson's Promontory, 0·06; Cape Otway, 0·05; and Omeo, 0·10.

Tasmania.—Fine, but cloudy, on N. coast, with fresh W.S.W. wind.

New Zealand.—Russell, barometer 29·90, wind W., 28, squally; Wellington, barometer 29·50, wind S.E., dull; Bluff, barometer 29·40, wind N.W., fine. Steady rain in north.

New South Wales.—Generally fine and clear, with light winds from N. to S. by W. and calms; barometers falling, smooth sea, and light wind on coast, cloudy south of Sydney. (Details in map above.)

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 13, dull, temperature 53°; Cape Otway, S.W., 13, dull, sea rough, temperature 52°; Portland, S.E., 23, cloudy, slight sea, temperature 54°; Wilson's Promontory, S.W., 48, dull, squally, rough sea, temperature 52.

New South Wales. Albury, S.W., fine but cloudy, temperature 64°; Cape St. George, E., 14, fine, smooth sea, temperature 63°; Deniliquin, calm, fine, temperature 66°; Dubbo, S.W., 14, fine, temperature 69°; Eden, S.W., 14, fine, smooth sea, temperature 69°; Goulburn, W., fine, temperature 62°; Moruya, E.N.E., 7, fine, smooth sea, temperature 67°; Newcastle, S.E., 14, fine, smooth sea, temperature 60°; Port Macquarie, E.N.E., 14, hazy, smooth sea, temperature 74°; Sydney, W.N.W., 10, dull and cloudy, smooth sea, temperature 60°; Wentworth, calm, fine, temperature 69°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 7 feet 3 inches above summer level; at Hay, 8 feet above summer level; Murray: At Albury, 8 feet 10 inches above summer level; at Euston, 10 feet 10 inches above summer level. Darling: At Wentworth, 8 feet 7 inches above summer level; at Pooncarie, low; at Menindie, summer level; at Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 3.

Sun rises at 5.57, sets at 6.2; Moon, 1.56 a.m. 12.22 p.m.; Mercury, 5.20 a.m., 5.14 p.m.; Venus, 7.23 a.m., 9.3 p.m.; Mars, 2.52 a.m., 1.10 p.m.; Jupiter, 4.50 a.m., 4.30 p.m.; Saturn, 12.46 a.m., 10.42 p.m. New moon, 8th; full moon, 24th.

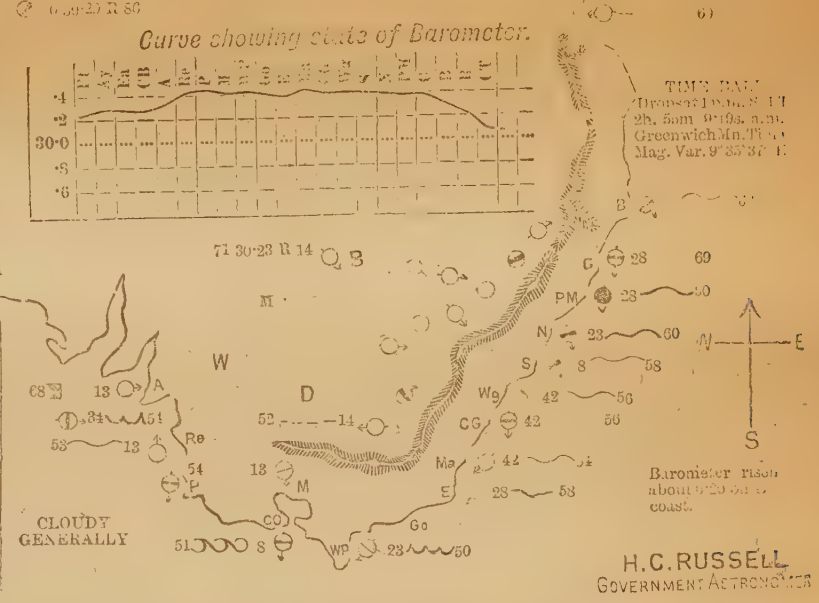
High water at Fort Denison, October 3: 2.32 a.m., 3.11 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 3, 1885.

Stations	W.T.	Mx	Mn	R'in
Albury ..	b	71	41	0
Armidale	c	74	49	0
Balranald	–	–	–	–
Bathurst ..	b	68	40	0
Bend'meer	c	73	44	0
Bodalla ..	b	79	44	0
Bourke ..	b	91	52	0
Camd'n H.	u	78	61	0
C. St. Geo.	c	66	54	0
Carcoar ..	b	61	46	0
Casino	c	89	60	0
Cassilis ..	c	71	57	0
Clarence ..	u	86	60	0
Condob'lin	–	–	–	–
Cooma	g	73	32	0
Coonab'n.	b	82	44	0
Coonamble	b	–	–	0
Cowra	b	66	61	0
Deniliquin	–	–	–	–
Dubbo ..	b	79	47	0
Eden	b	69	50	0
Euston ..	–	–	–	–
Forbes	b	73	46	0
Glen Innes	b	74	45	0
Goulburn	g	71	46	0
Grafton ..	g	94	59	0
Gunnedah	–	–	–	–
Hay	b	76	41	0
Hill End	b	–	–	0
Inverell ..	b	73	44	0
Kiandra ..	b	56	35	0
Lismore ..	u	89	64	0
Maitland ..	g	76	60	0
Marsdens	b	75	53	0
Menindie	–	–	–	–
Molong ..	b	75	44	0
Moree	–	–	–	–
Moruya ..	c	69	50	0
Moss Vale	d	–	–	0
M. Victoria	d	63	44	0
Mudgee ..	c	80	44	0
Murrumbh	–	–	–	–
Murr'r'ndi	b	72	53	0
Mus'lb'rook	u	82	51	0
Narrabri ..	b	98	54	0
Newcastle	b	72	56	0·02
Nowra	u	70	50	0
Orange ..	b	64	36	0
Picton	u	73	48	0
P. M'quarie	p	74	57	0·06
P. Stephens	b	69	49	0·02
Qu'nbeyan	b	67	51	0
Quirindi ..	b	85	55	0
Singleton	b	75	58	0
SYDNEY ..	g	68	56	0
Tamworth	b	75	48	0
Taralga ..	b	71	48	0
Taree	b	80	59	0·01
T'nt'rfield	b	76	46	0
Wagga....	b	73	39	0
Walcha ..	b	61	46	0
Walgett ..	b	73	53	0
Wentw'rth	–	–	–	–
Wilcannia	b	–	–	0
Woll'ng'ng	c	70	54	0·04
Young	b	87	43	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.: LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 27 years from Jan. 1st to September 30 41·159
Total Rainfall from January 1st to October 3 ..... 33·492
Barometers corrected to 32° Fah. and Mean Sea Level.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, with light N.E. and E. winds and calms, sea smooth, no rain; cloudy at Esperance Bay.

South Australia.—Generally fine and clear, scattered clouds in parts, winds fresh from S.E. to N.E.; rough sea, rising barometers, and fresh E. winds on coast. Rainfall: Eucla, 0·04. Calm and fine inland and in Northern Territory.

Victoria.—Cloudy and dull on coast, with southerly winds, rising barometers, and rough sea; squally from S.W. at Wilson's Promontory, misty at Cape Otway; no rain; calm and fine inland at Omeo, fresh S.S.W. wind and fine at Echuca.

Tasmania.—Hazy on N. coast, with light S.S.E. wind.

New Zealand.—Russell, barometer 29·80, wind N.W., dull; Wellington, barometer 29·40, wind N.W., fierce squalls, showery in night, rain 0·60; Bluff, barometer 29·40, wind S.W., dull.

New South Wales.—Cloudy on the mountains and coast line, showery at Port Macquarie; light rain falling at Moss Vale and Mount Victoria; wind generally southerly, varying from E. to W. by S., on the coast especially a fresh cold southerly wind is blowing, with a moderate and rising sea. The barometer readings (as will be seen in the curve above) are very uniform along the coast, but the rise since yesterday is much greater at the southern than northern stations. Inland, the weather is fine and clear, and at a few stations calm, but generally with light winds, varying from S.W. to S.E.

Queensland.—Generally fine and clear on E. coast, with light variable winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, W.S.E., 10, misty, sea rough, temperature 60°; Portland, E.S.E., 30, fine, rough sea, temperature 57°; Wilson's Promontory, W.S.W., 24, squally, moderate sea, temperature 53°.

New South Wales.—Albury, S.W., fine, warm, temperature 64°; Cape St. George, S.E., 42, cloudy, heavy sea, temperature 59°; Clarence River, S.E., 20, like rain, smooth sea, temperature 68°; Deniliquin, S.E., 14, fine, temperature 64°; Dubbo, calm, fine, temperature 70°; Eden, S., 14, fine, smooth sea, temperature 63°; Goulburn, calm, fine, temperature 58°; Moruya, S.E., 14, fine, moderate sea, temperature 66°; Newcastle, S.S.E., 30, cloudy, moderate sea, temperature 61°; Port Macquarie, S., 28, cloudy, moderate sea, temperature 68°; Sydney, S.E., 20, cloudy, smooth sea, temperature 62°; Wentworth, calm, fine, clear, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 9 inches above summer level; at Hay, 7 feet 9 inches above summer level. Murray: At Albury, 8 feet 10 inches above summer level. Darling: At Wilcannia, low; at Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 5.

Sun rises at 5.33, sets at 6.4; Moon, 3.30 a.m., 2.34 p.m.; Mercury, 5.21 a.m., 5.23 p.m.; Venus, 7.22 a.m., 9.12 p.m.; Mars, 2.48 a.m., 1.8 p.m.; Jupiter, 4.44 a.m., 4.22 p.m.; Saturn, 12.39 a.m., 10.35 p.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 5: 5.12 a.m., 5.19 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 5, 1885.

Stations	W.T.	M'N	M'X	R'N
Albury	b	50·15		0
Armidale	–	–	–	—
Balranald	b	69·36		0
Bathurst	b	75·39		0
Bend'meer	b	75·40		0
Bodalla	b	71·52		0
Bourke	c	93·61		0
Camd'n H.	b	67·48		0
C. St. Geo.	b	66·51		0
Carcoar	b	64·46		0
Casino	b	75·50		0
Cassilis	b	65·49		0
Clarence	–	–	–	–
Condob'lin	c	72·42		0
Cooma	b	59·62		0
Cootam'n.	b	50·57		0
Coraki b'c	b	–		0
Cowra	b	70·71		0
Deniliquin	c	55·56		0
Dubbo	b	71·57		0
Eden	b	[illegible]		0
Euston	b	[illegible]		0
Forbes	b	71·[illegible]		0
Glen Innes	b	71·49		0
Goulburn	b	77·21		0
Grafton	–	–	–	–
Grenfell	b	73·56		0
Hay	–	–	–	–
Hill End	b	—	—	0
Inverell	b	73·46		0
Kiandra	b	65·23		0
Lismore	–	75·[illegible]		–
Maitland	b	79·46		0
Marsdens	–	–	–	—
Menindie	–	–	–	–
Molong	–	–	–	—
Moree	–	–	–	—
Moruya	b	67·55		0
Moss Vale	b	–		0
M. Victoria	b	67·36		0
Mudgee	b	79·38		0
Murrumbh	b	80·43		0
Murr'r'ndi	b	71·45		0
Mus'lbrook	b	75·38		0
Narrabri	b	99·51		0
Newcastle	–	–	–	—
Nowra	b	71·45		0
Orange	b	65·39		0
Picton	b	68·49		0
P. M'quarie	b	68·46		0
P. Stephens	b	72·48		0
Quiriindi	b	66·42		0
Quirindi	c	90·52		0
Singleton	b	70·49		0
SYDNEY	b	69·51		0
Tamworth	b	75·47		0
Taralga	–	–	–	—
Taree	b	71·47		0·01
T'nt'rfield	c	76·51		0
Wagga	b	70·44		0
Walcha	–	–	–	—
Wagga	b	57·57		0
Wentw'rth	–	–	–	—
Wilcannia	–	–	–	—
Woll'ng'ng	b	73·52		0
Young	b	87·43		0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 5.... 33·464
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloud, wind E. T. storm, wind S. Rain, wind W. If it is CALM, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.

Curve showing state of Barometer.

TIME BALL Dropsat 1 p.m. S.M.T. 2h. 55m. 9·19s. a.m. Greenwich Mn. Time. Mag. Var. 9° 35′ 37″ E.

Barometer fallen about 0·20 on E. coast.

FINE GENERALLY

H. C. RUSSELL.
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'X gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine and warm, with scattered clouds, sultry in parts and dull on parts of coast; winds light from N.E. to N. and calm; sea smooth. Robe, 0·05; M'Donnell Bay, 0·02.

Victoria.—Generally cloudy on coast, with light northerly winds, falling barometers, and moderate sea. Fine and clear inland at Echuca, with light N.E. wind. Rainfall: Portland, 0·04.

Tasmania.—Fine but cloudy on N. coast, with light S. wind. No rain reported.

New Zealand.—Russell, barometer 30·10, wind S.W., 28, squally, passing showers; Wellington, barometer 30·06, wind W., light, fine, and clear; Bluff, barometer 29·80, wind S.W., 34, dull, passing showers.

New South Wales.—Fine and clear throughout, with light northerly winds and calms, and falling barometers; smooth sea on coast; generally calm inland. Details in map above.

Queensland.—Fine and clear on east coast; sea moderate; winds southerly and easterly. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers falling. Melbourne, N.N.E., 12, fine, temperature 78°; Cape Otway, N.W., 6, fine, sea smooth, temperature 76°; Portland, S.W., 18, fine, smooth sea, temperature 61°; Wilson's Promontory, N.E., 6, cloudy, smooth sea, temperature 72°.

New South Wales.—Sydney, N.E., 20, very fine, clear, temperature 63°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 7 inches above summer level; at Balranald, 10 feet 1 inch above summer level. Murray: At Albury, 8 feet 8 inches above summer level; at Euston, 11 feet 1 inch above summer level.

ASTRONOMICAL MEMORANDA FOR OCTOBER 6.

Sun rises at 5.32, sets at 6.5; Moon, 4.12 a.m., 3.40 p.m.; Mercury, 5.21 a.m., 5.27 p.m.; Venus, 7.22 a.m., 9.14 p.m.; Mars, 2.46 a.m., 1.7 p.m.; Jupiter, 4.21 a.m., 4.21 p.m.; Saturn, 12.35 a.m., 10.31 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 6, 6.15 a.m., 6.30 p.m.

METEOROLOGICAL ABSTRACT, SEPTEMBER, 1885, with results for the same month during the preceding 26 years:—

—	Barometer at 32° Fah. and mn. sea lev'l.	Temperature in Shade.			Rainfall.	
		Mean Max.	Mean Min.	Mean.	Amount Inches.	No. of days.
Sept., 1885 ...	30·131	69·9	58·4	61·7	0·667	8
Average for 27 years ...	30·047	68·8	51·1	58·8	3·151	11
Monthly Extremes:						
Highest ...	30·240	71·4	53·9	61·7	14·045	18
Year ...	1871.	1865.	1879.	1885.	1879.	1878.
Lowest ...	29·861	62·1	48·5	56·7	0·083	3
Year ...	1874.	1864.	1875.	1869.	1882.	1882.

Wind. September, 1885: Prevailing direction, N.E.; average direction for same month for 27 years, W.; mean miles per hour, 9·3.

Temperature.—September, 1885: Highest shade temperature, 80·5, on 5th; highest shade temperature in any September since 1859, 89·1, on 24th September, 1882; lowest shade temperature, 45·8, on 7th; lowest shade temperature in any September since 1859, 40·8, on 18th, 1864.

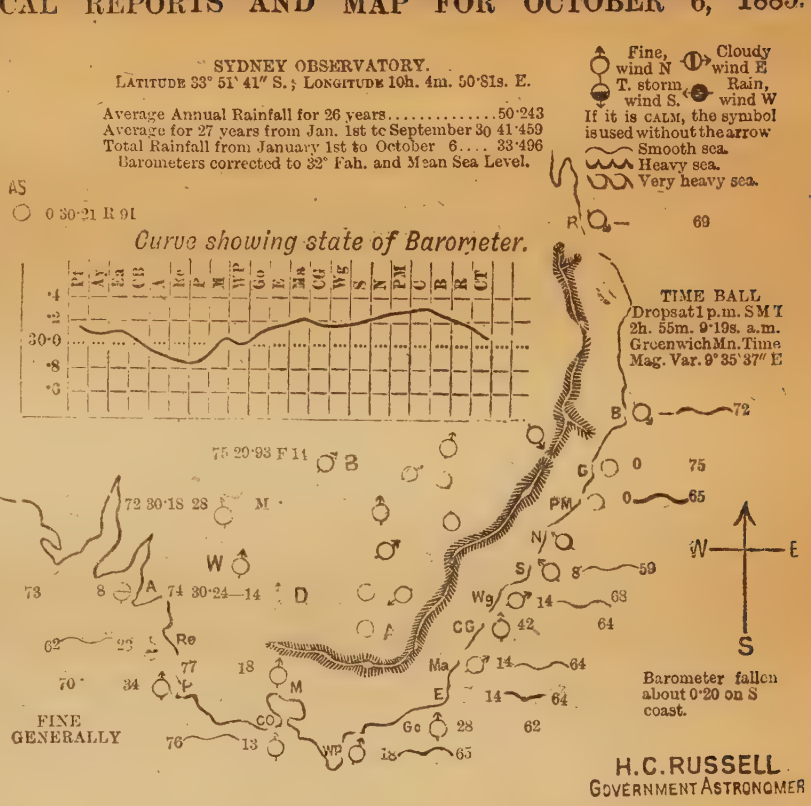
Rainfall.—September, 1885: Greatest fall in one day, 0·185, on 27th. Greatest fall in one day in any September since 1859, 5·691, on 10th, 1879.

The rainfall is again very much below the average, and the mean temperature in the shade is higher than that registered in any September on record.

H. C. RUSSELL, Government Astronomer.
Observatory, October 2, 1885.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 6, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	85	51	0
Armidale	b	74	50	0
Balranald	b	101	72	0
Bathurst	b	76	42	0
Bend'm'r	b	74	45	0
Bodalla ..	..	—	—	—
Bourke ..	b	94	61	0
C'md'n H.	b	71	58	0
C. St. Geo.	b	64	59	0
Carcoar ..	b	62	53	0
Casino ..	b	87	45	0
Cassilis .	b	73	51	0
Clarence	b	83	56	0
C'ld'b'lin	b	69	43	0
Cooma ..	b	80	36	0
Cootah'n	b	84	43	0·85
C'namble	b	—	—	0
Cowra ..	b	71	63	0
Deniliq'n	b	94	50	0
Dubbo ..	b	87	49	0
Eden	b	66	58	0
Euston ..	b	101	50	0
Forbes ..	b	88	48	0
Gl'n Inn's	c	75	46	0
Goulburn .	b	82	37	0
Grafton ..	b	87	57	0
Gunned'h	b	83	56	0
Hay	b	88	52	0
Hill End	b	—	—	0
Inverell ..	b	75	47	0
Kiandra	n	67	30	0
Lismore	c	80	53	0
Maitland	b	74	50	0
Marsdens	b	85	58	0
Menindie	b	88	63	0
Molong ..	b	81	46	0
Moree ..	b	84	75	0·68
Moruya ..	b	68	50	0
Moss Vale	b	—	—	0
M. Vict'ria	b	70	44	0
Mudgee ..	b	87	45	0
M'rr'mb'h	b	83	39	0
M'rr'r'ndi	b	75	43	0
Mus'lbr'k	b	81	44	0
Narrabri	b	96	53	0·28
Newcastle	b	69	57	0
Nowra ..	b	77	47	0
Orange ..	b	68	42	0
Picton ..	f	64	46	0
P. M'q'rie	b	72	47	0
P.St'ph'ns	b	74	50	0
Q'nbeyan	b	69	48	0
Quirindi	b	86	55	0
Singleton	b	76	52	0
SYDNEY ..	b	68	51	0
Tamw'rth	b	80	52	0
Taralga ..	b	80	40	0
Taree	b	78	49	0
T'nt'rfield	c	78	52	0
Wagga ..	b	85	47	0
Walcha ..	b	71	43	0
Walgett ..	b	89	57	0
W'ntw'rth	b	91	58	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	72	50	0
Young ..	b	91	46	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, light variable winds and calms, sea moderate. Rainfall—Albany, 0·25; Esperance Bay, 0·08.

South Australia reports weather generally dull: winds, N.E. to N.W., fresh; hot inland to Peake, moderate sea, steady barometers, and fresh N. wind on coast. No rain. Sultry and hot in southern parts.

Victoria.—Generally fine and clear, with light to fresh N. winds (warm), falling barometers, and moderate sea on coast; hazy, with light E.N.E. wind, inland at Omeo.

New Zealand.—Russell, barometer 30·30, wind calm, dull; Wellington, barometer 30·10, wind calm, fine; Bluff, barometer 30·10, wind S.W., 34, fine.

New South Wales.—Generally fine and clear throughout entire colony; winds light from N.W. to N.E.; smooth sea, falling barometers, and very clear weather and light winds on coast.

Queensland.—Generally fine and clear, with light easterly to S.E. winds, and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.N.E., 18, fine, squally, temperature 68.; Portland, W., 46, half-clouded, smooth sea, temperature 66°; Wilson's Promontory, S.W., 18, sultry, hazy, smooth sea, temperature 76°.

New South Wales.—Albury, S.W., fine, warm, temperature 74.; Cape St. George, N., 42, fine, smooth sea, temperature 66.; Clarence River, E., 14, fine, smooth sea, temperature 71°; Deniliquin' N., fine, temperature 85°; Dubbo, calm, fine, temperature 76°' Eden, N.E., 28, fine, smooth sea, temperature 68°; Goulburn, calm, fine, temperature 66°; Menindie, N., 56, cloudy, fine' Moruya, N.E., 56, fresh gale, moderate sea, temperature 68°; Newcastle, N.E., strong, fine, smooth sea, temperature 68°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 75°; Sydney, E., 13, fine, smooth sea, temperature 68°; Wentworth, N.W., 42, fine, hot, temperature 80°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 6 inches above summer level; at Hay, 7 feet 7 inches above summer level; at Balranald, 10 feet 1 inch above summer level. Murray: At Albury, 8 feet 6 inches above summer level; at Euston, 11 feet 2 inches above summer level. Darling: At Wentworth, 9 feet above summer level; at Pooncarie, Menindie, Wileannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 6.

Sun rises at 5.31, sets at 6.7; Moon, 4.52 a.m., 4.44 p.m.; Mercury, 5.22 a.m., 5.32 p.m.; Venus, 7.21 a.m., 9.15 p.m.; Mars, 2.44 a.m., 1.6 p.m.: Jupiter, 4.37 a.m., 4.19 p.m.; Saturn, 12.32 a.m., 10.28 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 7, 7.14 a.m., 7.38 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 7, 1885.

Stations	wt	Mx	Mn	r'in
Albury	u	86	57	0
Armidale	b	76	47	0
Balranald	b	100	54	0
Bathurst	b	81	41	0
Bend'm'r	b	77	43	0
Bodalla ..	b	78	43	0
Bourke ..	b	99	64	0
C'md'n H.	b	72	60	0
C. St. Geo.	b	69	58	0
Carcoar ..	b	72	50	0
Casino ..	b	85	45	0
Cassilis ..	b	71	51	0
Clarence	c	84	58	0
C'nd'b'lin	b	73	54	0
Cooma ..	c	83	58	0
Coonab'n	b	81	45	0
C'namble	u	—	—	0
Cowra ..	—	—	—	—
Deniliq'n	u	93	55	0
Dubbo ..	b	87	47	0
Eden	c	69	56	0
Euston ..	b	101	57	0
Forbes ..	b	90	55	0
Gl'n Inn's	b	81	48	0
Goulburn	b	85	41	0
Grafton ..	b	88	55	0
Gunned'h	b	83	58	0
Hay	b	91	61	0
Hill End	b	—	—	0
Inverell ..	b	75	46	0
Kiandra	u	70	42	0
Lismore	c	80	55	0
Maitland	b	78	50	0
Marsdens	b	86	61	0
Menindie	c	92	66	0
Molong ..	b	84	47	0
Moree ..	b	87	57	0
Moruya ..	c	71	51	0
Moss Vale	b	—	—	0
M. Vict'ria	b	73	50	0
Mudgee ..	b	87	40	0
M'rr'mb'h	b	84	50	0
M'rr'r'ndi	b	77	55	0
Mus'lbr'k	b	84	45	0
Narrabri	b	93	58	0
Newcastle	—	—	—	—
Nowra ..	b	81	49	0
Orange ..	b	71	42	0
Picton ..	b	77	44	0
P. M'q'rie	b	74	54	0
P.St'ph'ns	b	73	57	0
Q'nbeyan	b	75	50	0
Quirindi	b	96	57	0
Singleton	b	78	55	0
SYDNEY ..	b	69	60	0
Tamw'rth	b	81	50	0
Taralga ..	b	83	49	0
Taree	b	79	51	0
T'nt'rfield	b	75	43	0
Wagga ..	b	89	54	0
Walcha ..	b	76	42	0
Walgett ..	b	84	61	0
W'ntw'rth	b	98	57	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	74	58	0
Young ..	c	90	48	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 7.... 33·502
Barometers corrected to 32° Fah. and Mean Sea Level.

H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n. frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with light easterly winds and smooth sea. No rain.

South Australia reports weather generally fine, with scattered clouds S. of Burrow Creek. Winds light from S.W. to S.E.; smooth and moderate sea, light S.W. winds, and rising barometers on coast. Rainfall: M'Donnell bar, 0·03.

Victoria.—Cloudy, with light S.W. and W. winds, rising barometers, and rough sea on coast; fresh N. wind and fine but cloudy inland at Omeo. Rainfall: Lake Entrance, 0·01. Foggy at Cape Otway.

Tasmania.—Fine and clear on N. coast, with fresh W.N.W. wind.

New Zealand.—Russell, barometer 30·30, wind S.W., dull; Wellington, barometer 30·20, wind E., fine; Bluff, barometer 30·10, wind N.W., 34, fine.

New South Wales.—Fine clear weather generally, scattered clouds in places (see map). Smooth sea, steady barometers, and light N. winds on coast; northerly winds and calm inland. No rain.

Queensland.—Fine and clear on E. coast, with light S.E. winds and moderate sea. Rainfall: Rockhampton, 0·12.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 18, fine, temperature 60°; Portland, S.W., 28, fine, smooth sea, temperature 59°; Cape Otway, W., 13, dull, rough sea, temperature 60°; Wilson's Promontory, W., 23, cloudy, squally, moderate sea, temperature 61°.

New South Wales.—Albury, S.W., fine, warm, temperature 74., Clarence River, N.E., 14, fine, smooth sea, temperature 72°; Cape St. George, N., 42, fine, smooth sea, temperature 77°; Deniliquin, W., fine, temperature 77°; Dubbo, W., 14, fine, temperature 74°; Eden, S.W., 28, fine, smooth sea, temperature 62°; Goulburn, N.W., fine, temperature 78°; Moruya, S., 42, dull, moderate sea, temperature 61°; Newcastle. N.E., 13, fine, smooth sea, temperature 73°; Port Macquarie, N.E., 42, hazy, smooth sea, temperature 74°; Sydney, N.E., 8, fine, smooth sea, temperature 74°; Wentworth, N.W., 42, fine, temperature 71°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 feet 6 inches above summer level; at Hay, 8 feet 1 inch above summer level; at Balranald, 10 feet above summer level. Murray: At Albury, 8 feet 5 inches above summer level; at Euston, 11 feet 2 inches above summer level. Darling: At Wentworth, 9 feet 1 inch above summer level; at Pooncarie, Menindie, Wileannia, and Bourke, low.

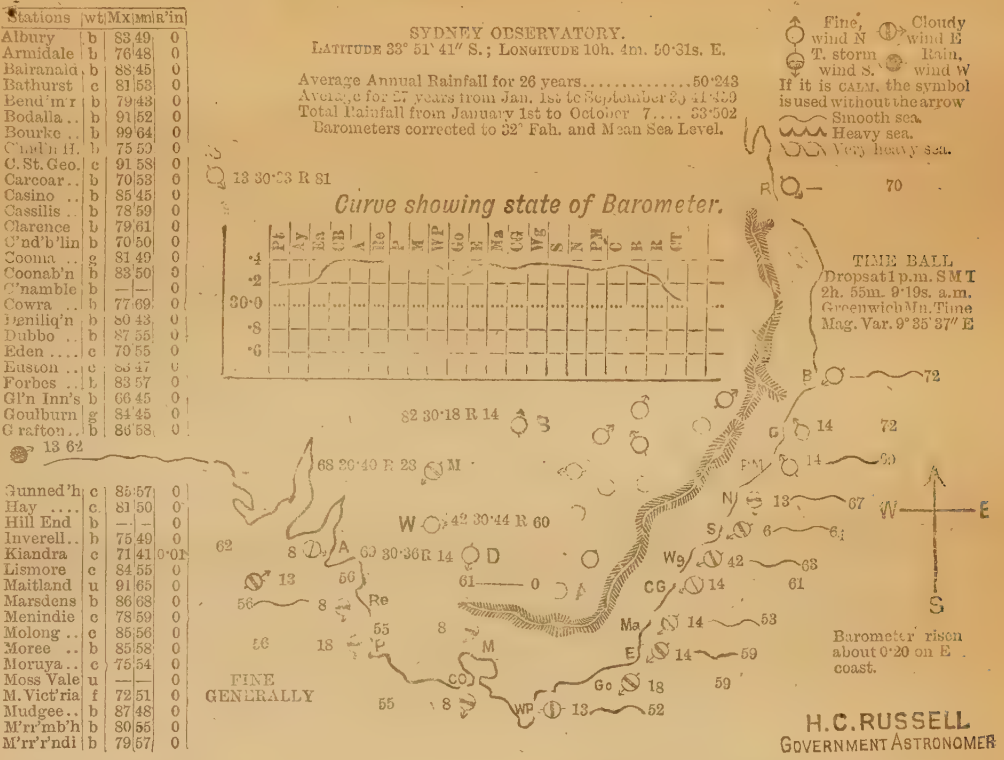
ASTRONOMICAL MEMORANDA FOR OCTOBER 8.

Sun rises at 5.29, sets at 6.7; Moon, 5.30 a.m., 5.46 p.m. Mercury, 5.22 a.m., 5.37 p.m.; Venus, 7.21 a.m., 9.17 p.m.; Mars, 2.42 a.m., 1.5 p.m.: Jupiter, 4.34 a.m., 4.16 p.m.; Saturn, 12.28 a.m., 10.24 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 8: 7.59 a.m., 8.20 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 8, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	83	49	0
Armidale	b	76	48	0
Bairanald	b	88	45	0
Bathurst	c	81	53	0
Bend'mr	b	79	43	0
Bodalla ..	b	91	52	0
Bourke ..	b	99	64	0
C'nd'n H.	b	75	50	0
C. St. Geo.	c	91	58	0
Carcoar ..	b	70	53	0
Casino ..	b	85	45	0
Cassilis ..	b	78	59	0
Clarence	b	79	61	0
C'nd'b'lin	b	70	50	0
Cooma ..	g	81	49	0
Coonab'n	b	83	50	0
C'namble	b	—	—	0
Cowra ..	b	77	69	0
Deniliq'n	b	80	43	0
Dubbo ..	b	87	55	0
Eden	c	70	55	0
Euston ..	c	83	47	0
Forbes ..	b	83	57	0
Gl'n Inn's	b	66	45	0
Goulburn	g	84	45	0
Grafton ..	b	86	58	0
Gunned'h	c	85	57	0
Hay	c	81	50	0
Hill End	b	—	—	0
Inverell ..	b	75	49	0
Kiandra	c	71	41	0·01
Lismore	c	84	55	0
Maitland	u	91	65	0
Marsdens	b	86	68	0
Menindie	c	78	59	0
Molong ..	c	85	56	0
Moree ..	b	85	58	0
Moruya ..	c	75	54	0
Moss Vale	u	—	—	0
M. Vict'ria	f	72	51	0
Mudgee ..	b	87	48	0
M'rr'mb'h	b	80	55	0
M'rr'r'ndi	b	79	57	0
Mus'lbr'k	g	90	57	0
Narrabri	b	96	55	0
Newcastle	c	72	62	0
Nowra ..	g	91	56	0
Orange ..	b	72	52	0
Picton ..	o	85	54	0
P. M'q'rie	b	72	51	0
P.St'ph'ns	g	75	53	0
Q'nbeyan	b	75	54	0
Quirindi	b	95	59	0
Singleton	g	86	62	0
SYDNEY ..	g	75	61	0
Tamw'rth	b	82	50	0
Taralga ..	f	82	50	0
Taree	g	83	52	0
T'nt'rfield	b	77	43	0
Wagga ..	b	83	51	0
Walcha ..	b	77	43	0
Walgett ..	b	87	62	0
W'ntw'rth	b	79	51	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	76	57	0
Young ..	b	89	54	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light easterly and southerly winds and smooth sea. No. rain.

South Australia.—Generally fine, with scattered clouds, and light S.E. to N.E. winds; smooth sea, falling barometer, and cloudy weather on coast; calm in Northern Territory; S.E. winds and warm in interior. Light rain falling at Eucla. No measurements reported.

Victoria.—Generally cloudy, with light southerly winds, steady barometer, and smooth sea. Rainfall, C. Otway, 0·01; misty on coast; S.W. winds and calm, with cloudy weather inland at Echuca and Omeo.

Tasmania.—Dull and misty on N. coast, with light N. wind.

New Zealand.—Russell, barometer 30·30, wind S.W., fine and clear; Wellington, barometer 29·90, wind N.W., fine; Bluff, barometer 29·80, wind W., 40, squally.

New South Wales.—Generally fine, with scattered clouds. Dull in places on coast, and foggy on mountains. (See map above.) Sea smooth, winds light from S.W., barometer rising; light variable winds and calm inland.

Queensland.—Fine and clear on E. coast, with S.E. to S.W. winds and moderate sea. No rain. Dull at Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W, 13, fine but cloudy, temperature 67°; Portland, S.S.E., 13, dull, smooth sea, temperature 56°; Wilson's Promontory, S.W., 18, fine but cloudy, slight sea, temperature 61°.

New South Wales.—Albury, W., fine, clear, temperature 70°; Cape St. George, S.E., 14, fine, smooth sea, temperature 65°; Clarence River, N.E., 14, fine, smooth sea, temperature 70°; Deniliquin, S., fine, temperature 72°; Dubbo, W., 14, fine, temperature 75°; Goulburn, E., fine, temperature 67°; Menindie, calm, fine, temperature 63°; Moruya, S.E., 28, cloudy, smooth sea, temperature 62°; Newcastle, S., moderate sea, temperature 60°; Port Macquarie, S.E., 14, hazy, smooth sea, temperature 66°; Sydney, E.S.E., 8, cloudy, smooth sea, temperature 66°; Wentworth, calm, fine, temperature 68°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 11 inches above summer level; at Hay, 8 feet above summer level; at Balranald, 10 feet 2 inches above summer level. Murray: At Albury, 7 feet 10 inches above summer level; at Euston, 11 feet 3 inches above summer level. Darling: At Wentworth, 9 feet 2 inches above summer level; at Pooncarie and Menindie, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 9.

Sun rises at 5.28, sets at 6.7; Moon, 6.8 a.m., 6.48 p.m. Mercury, 5.22 a.m., 5.42 p.m.; Venus, 7.21 a.m., 9.19 p.m.; Mars, 2.40 a.m., 1.4 p.m.: Jupiter, 4.30 a.m., 4.13 p.m.; Saturn, 12.24 a.m., 10.20 p.m. New moon, 8th; full moon, 24th.

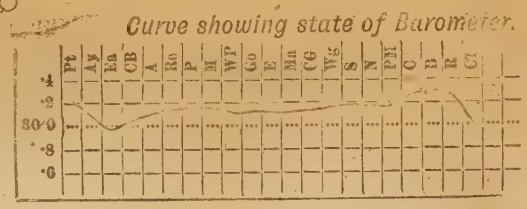
High water at Fort Denison, October 9: 8.44 a.m., 9.1 p.m.

METEOROLOGICAL REPORT AND MAP FOR OCTOBER 9, 1

Stations	wt	Mx	Mn	r
Albury	u	78	50	0
Armidale	b	79	54	0
Balranald	c	86	67	0
Bathurst	g	82	54	0
Bend'm'r	b	80	50	0
Bodalla ..	-	—	—	—
Bourke ..	c	102	68	0
C'md'n H.	b	74	62	0
C. St. Geo.	u	68	56	0
Carcoar ..	g	72	63	0
Casino ..	b	87	46	0
Cassilis ..	b	—	—	0
Clarence	p	81	58	0
C'nd'b'lin	g	66	50	0
Cooma ..	c	78	45	—
Coonab'n	c	87	50	0
C'namble	c	—	—	0
Cowra ..	b	77	—	0
Deniliq'n	u	57	—	0
Dubbo ..	b	92	58	0
Eden	u	70	58	0
Euston ..	c	85	53	0
Forbes ..	b	83	53	0
Gl'n Inn's	b	81	48	0
Goulburn	b	82	53	0
Grafton ..	b	92	55	0
Gunned'h	c	87	61	0
Hay	c	76	50	0
Hill End	c	—	—	0
Inverell ..	b	77	54	0
Kiandra	b	70	35	0
Lismore	b	85	58	0
Maitland	g	78	65	0
Marsdens	c	86	61	0
Menindie	g	80	68	0
Molong ..	c	76	57	0
Moree ..	b	90	60	0
Moruya ..	u	66	56	0
Moss Vale	g	—	—	0
M. Vict'ria	u	73	52	0
Mudgee ..	c	91	52	0
M'rr'mb'h	-	—	—	—
M'rr'r'ndi	b	79	59	0
Mus'lbr'k	c	83	60	0
Narrabri	u	90	60	0
Newcastle	g	70	62	0
Nowra ..	-	—	—	—
Orange ..	g	76	52	0
Picton ..	f	74	58	0
P. M'q'rie	b	74	59	0
P.St'ph'ns	c	77	56	0
Q'nbeyan	b	74	57	0
Quirindi	c	96	67	0
Singleton	b	78	45	0
SYDNEY ..	u	68	62	0
Tamw'rth	c	84	56	0
Taralga ..	g	71	54	0
Taree	b	80	55	0
T'nt'rfield	b	79	44	0
Wagga ..	c	78	47	0
Walcha ..	b	71	48	0
Walgett ..	c	91	63	0
W'ntw'rth	-	—	—	—
Wilcannia	c	—	—	0
W'll'ng'ng	c	70	60	0
Young ..	g	93	53	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 1m. 50·01s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 9.... 33·502
Barometers corrected to 32° Fah. and Mean Sea Level.



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with it, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquerie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with fresh S. wind and smooth sea. Heavy showers at Albany.

South Australia reports weather generally cloudy, sultry inland to Charlotte; winds light from N.E. to N., dull north of Katherine; smooth sea, falling barometers, and light N. winds on coast. Thunderstorm last night, 8.30, at Eucla. Rain 0.06.

Victoria.—Generally cloudy, light N.W. winds, falling barometer, and smooth sea on coast; cloudy, with N. wind, inland at Omeo; fine, but cloudy, with S.W. wind, at Echuca. No rain.

Tasmania.—Dull and misty on N. coast, with light W.N.W. wind.

New Zealand.—Russell, barometer 30·20, wind N.W., dull; Wellington, barometer 30·20, wind S.E., fine; Bluff, barometer 30·20, wind SE., fine; Gisborne, barometer 30.20, wind S.E., 40.

New South Wales.—Cloudy generally, but no rain; winds light and variable, but generally calm. Barometer falling throughout colony. Calm and dull on coast from Sydney southwards; sea smooth. Details in map.

Queensland.—Generally fine and clear, with S.E. winds. Dull at Cooktown. Rather rough sea at Townsville. Rain, Rockhampton, 0·01.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., cloudy, temperatu Cape St. George, N.E., 28, cloudy, smooth sea, temperat Clarence River, N., 28, fine, smooth sea, temperatu Deniliquin, S.W., cloudy, temperature 74°; Eden, N., smooth sea, temperature 63°; Goulburn, N.W., fine, ture 70°; Menindie, calm, cloudy, temperature S.E., 11, dull, temperature 62°; Newcastle, N.E. sea, temperature 69°; Port Macquarie, N.N.E., 28, sea, temperature 73°; Sydney, N.E., 8, dull, smooth se ture 67°; Wentworth, N.E., 11, fine, temperature

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 3 inches above at Hay, 8 feet 4 inches above summer level; at Balranald 2 inches above summer level. Murray: At Albury, inches above summer level; at Euston, 11 feet 3 inches summer level. Darling: At Menindie, Wilcannia, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 16.

Sun rises at 5.27, sets at 6.8; Moon, 6.43 a.m. Mercury, 5.23 a.m., 5.16 p.m.; Venus, 7.29 a.m., 9. Mars, 2.38 a.m., 1.3 p.m.; Jupiter, 4.27 a.m., 2.10 p.m.; 12.20 a.m., 10.16 p.m. New moon, 8th; full moon, 24th.

High water at Port Denison, October 10: 9.20 a.m., 9.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 10, 1885.

Stations	wt	Mx	Mn	R'in
Albury	g	74	51	0
Armidale	b	81	56	0
Balranald	d	93	54	0
Bathurst	c	80	50	0
Bend'm'r	b	80	54	0
Bodalla ..	g	76	54	0
Bourke ..	b	101	64	0
C'md'n H.	o	76	66	0
C. St. Geo.	–	–	–	–
Carcoar ..	b	72	53	0
Casino ..	b	91	42	0
Cassilis ..	b	80	65	0
Clarence	–	–	–	—
C'nd'b'lin	c	72	47	0
Cooma ..	c	80	40	0
Coonab'n	b	83	58	0
C'namble	g	–	–	0
Cowra ..	b	73	53	0
Deniliq'n	u	82	57	0
Dubbo ..	b	89	36	0
Eden	c	65	59	0
Euston ..	r	91	60	0
Forbes ..	b	73	51	0
Gl'n Inn's		82	49	0
Goulburn	b	80	47	0
Grafton ..	b	91	58	0
Gunned'h	c	86	61	0
Hay	c	81	61	0
Hill End	b	–	–	0
Inverell ..	h	76	55	0
Kiandra	c	69	35	0
Lismore	b	86	57	0
Maitland	b	87	63	0
Marsdens	b	76	61	0
Menindie	–	–	–	—
Molong ..	b	89	57	0
Moree ..	b	88	63	0
Moruya ..	c	70	58	0
Moss Vale	b	–	–	0
M. Vict'ria	b	75	53	0
Mudgee ..	c	87	51	0
M'rr'mb'h	b	80	51	0
M'rr'r'ndi	b	80	66	0
Mus'lbr'k	c	94	57	0
Narrabri	g	99	68	0
Newcastle	c	73	65	0
Nowra ..	–	–	–	–
Orange ..	c	76	51	0
Picton ..	b	74	55	0
P. M'q'rie	b	73	61	0
P.St'ph'ns	c	79	58	0
Q'nbeyan	b	72	51	0
Quirindi	b	88	67	0
Singleton	b	90	71	0
SYDNEY ..	b	71	62	0
Tamw'rth	–	–	–	—
Taralga ..	b	79	50	0
Taree	c	85	64	0
T'nt'rfield	b	81	48	0
Wagga ..	c	80	49	0
Walcha ..	c	77	52	0
Walgett ..	b	93	69	0
W'ntw'rth	r	87	64	0·11
Wilcannia	o	–	–	0
W'll'ng'ng	c	87	60	0
Young ..	c	80	51	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years..... 50·213
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 10.... 33·502
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, Cloudy, wind E. T. storm, wind S. If it is cold, the symbol is used with the wind. Smooth sea. Heavy sea. Very heavy sea.

Curve showing state of Barometer.

TIDE TABLE.
Drops at 1 p.m. S.M.T.
2h. 55m. 8·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35' 37" E

CLOUDY GENERALLY

Barometer fallen about 0·20 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n. the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally cloudy, and raining inland to Herbert; winds N.W. to S.W.; heaviest rain near George Town, 0·70 to 0.98. Telegrams too late for map.

Victoria.—Generally cloudy, with fresh northerly winds; slight sea and falling barometers on coast; showery at Portland; rather rough sea at Cape Otway; squally at Wilson's Promontory, with threatening appearance in N.W.; cloudy inland at Omeo. Rainfall: Portland, 0·25.

Tasmania.—Steady rain falling on N. coast, with fresh N.E. wind. Rainfall: Low Heads, 0·12.

New Zealand.—Russell, barometer 30·20; Wellington, barometer, 30·20; Bluff, barometer 30·10. Calm and fine generally.

New South Wales.—Generally fine, with scattered clouds; dull in S. and S.W., with rain falling at Balranald and Wentworth. See map above for details. Smooth sea, falling barometers, and light northerly winds, tending to E. on coast. Calm inland.

Queensland.—Generally fine and clear, with S.E. winds and smooth sea. Rainfall, Cooktown 0·02.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, W., 18, squally, with rain, rough sea, temperature 58°; Portland, W., 34, squally, with rain, smooth sea, temperature 57°; Wilson's Promontory, W., 34, fierce squalls of wind and rain, moderate sea, temperature 56°.

New South Wales.—Albury, calm, raining, temperature 64°; Cape St. George, N.E., 40, fine, smooth sea, temperature 71°; Clarence River, N.E., 20, fine, smooth sea, temperature 72°; Deniliquin, N.W., cloudy, temperature 67°; Dubbo, N.W., 20, cloudy, temperature 8[illegible]; Eden, N.E., 14, cloudy, smooth sea, temperature 64°; Goulburn, N.W., fine, temperature 72°; Menindie, W., cloudy, temperature 76°; Moruya, N.E., 40, cloudy, moderate sea, temperature 67°; Newcastle, N.E., 10, fine, smooth sea, temperature 79°; Port Macquarie, N.N.E., 40, hazy, moderate sea, temperature 72°; Sydney, E.N.E., 15, cloudy, warm, smooth sea, temperature 76°; Wentworth, W., cloudy, temperature 65°.

From 10 a.m. on Saturday the barometer fell fast in Sydney, and all day clouds were drifting over from N.W. It will be seen, however, that the bad weather was in Victoria, not in this colony.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 11 inches above summer level; at Hay, 8 feet above summer level; at Balranald, 10 feet 2 inches above summer level. Murray: At Albury, 7 feet above summer level; at Euston, 11 feet 3 inches above summer level; at Boomaarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 12.

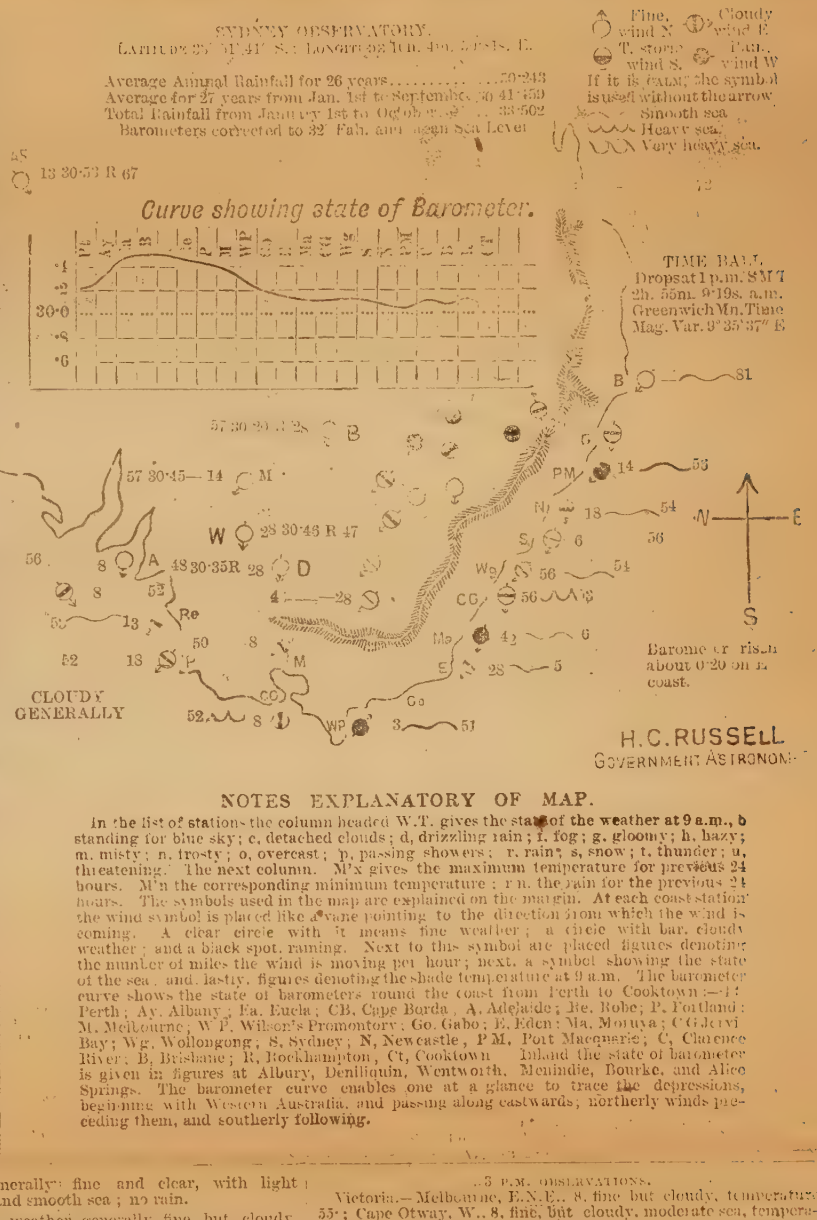
Sun rises at 5.24, sets at 6.9; Moon, 8 13 a.m., 9.41 p.m.; Mercury, 5.23 a.m., 5.56 p.m.; Venus, 7.29 a.m., 9.25 p.m.; Mars, 2.34 a.m., 1.1 p.m.; Jupiter, 1.20 a.m., 4.1 p.m.; Saturn, 12.12 a.m., 10.8 p.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, 10.35 a.m., 10.53 p.m.

Stations	wt	Mx	Mn	R'in
Albury	u	70	38	0·75
Armidale	r	85	56	0·47
Balranald	b	66	29	0·49
Bathurst	u	84	39	0·13
Bend'm'r	r	78	58	0·86
Bodal'a	r	80	43	0·37
Bourke	b	69	46	0
C'md'n H.	r	80	58	0·99
C. St. Geo.	c	68	44	0
Carcoar	u	75	46	0·57
Casino	g	96	67	0
Cassilis	u	60	56	0·22
Clarence	u	80	61	0
C'nd'b'lin	g	50	32	0·31
Cooma	s	81	36	0
Coonab'n	c	75	46	0·16
C'namble	b	—	—	0·30
Cowra	b	75	61	0·50
Deniliq'n	c	71	35	0·67
Dubbo	b	63	41	0·27
Eden	u	66	47	0·27
Euston	b	64	36	0
Forbes	b	83	39	0·45
Gl'n Inn's	r	87	54	0·08
Goulburn	g	63	54	0·01
Grafton	u	107	67	0
Gunned'h	g	81	54	0·44
Hay	c	69	31	0
Hill End	u	—	—	0·27
Inverell	u	82	56	0·19
Kiandra	s	46	26	1·43
Lismore	u	95	67	0
Maitland	r	86	56	0·76
Marsdens	c	82	48	0·50
Menindie	b	69	45	0·28
Molong	c	65	41	0·30
Moree	r	61	53	0·22
Moruya	p	66	37	0·38
Moss Vale	u	65	42	0
M. Vict'ria	u	80	39	0
Mudgee	u	88	43	0·10
M'rr'mb'h	c	65	39	0
M'rr'r'ndi	u	85	55	0·64
Mus'lbr'k	r	85	49	0·72
Narrabri	u	94	54	0·41
Newcastle	g	83	52	1·53
Nowra	u	76	48	0
Orange	g	57	37	0
Picton	g	71	51	0
P. M'q'rie	r	80	54	0·73
P.St'ph'ns	r	73	55	1·40
Q'nbeyan	g	78	43	0·14
Quirindi	r	92	64	0·42
Singleton	r	74	53	0·93
SYDNEY	g	70	54	0·04
Tamw'rth	r	80	50	0·66
Taralga	g	80	34	0
Taree	r	87	56	1·28
T'nt'rfield	u	87	59	0
Wagga	b	83	34	0·47
Walcha	r	77	50	0·77
Walgett	p	71	27	0·26
W'ntw'rth	b	66	38	0·23
Wilcannia	b	—	—	0
W'll'ng'ng	g	72	51	0·04
Young	u	73	35	0·88

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.: LONGITUDE 10h. 4m. 57·8s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 27 years from Jan. 1st to September 30 41·539
Total Rainfall from January 1st to October 9 .. 33·502
Barometers corrected to 32° Fah. and mean Sea Level



H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—P, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton, Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light easterly winds and calms, and smooth sea; no rain.

South Australia reports weather generally fine but cloudy, showery over Mount Lofty ranges, light rains recorded inland to Charlotte, heaviest 0·88 at Melrose and 0·86 at Strathalbyn; winds generally light and from S.W. to S.E.; smooth sea and rising barometer on coast; fine in Northern Territory. Rainfall—Eucla 0·01, Streaky Bay 0·04, Cape Borda 0·18, Adelaide 0·29, Robe 0.19 M'Donnell Bay 0·24.

Victoria.—Generally cloudy and dull, passing showers at Wilson's Promontory; slight sea, rising barometers, and light S.W. winds on coast; fine inland at Echuca, dull at Omeo. Rainfall—Melbourne 0·71, Portland 0·79, Cape Otway 0·06, Wilson's 0·54, Omeo 0·78.

Tasmania.—Fine and clear on N. coast, light N.N.W. wind.

New Zealand.—Russell, barometer 30·10, wind N.W., fine; Wellington, barometer 29·60, wind N.W., dull, fierce squalls in night; Bluff, barometer 29·80, wind S.W., fierce; West Coast, strong S.W. wind and showery.

New South Wales.—It will be seen from the map that a very general but light rain has fallen, extending inland as far as Walgett, Dubbo, Condobolin, Menindie, and Wentworth, but not at Bourke or Wilcannia—the heaviest falls being on and near the coast. At 9 a.m. snow was falling at both Kiandra and Cooma; and the wind generally was southerly. At 9 a.m. fine weather was reported in the S.W., at Wentworth, Deniliquin, and Menindie; and in the W. and N.W., at Dubbo, Forbes, Bourke, Walgett, Coonamble, and Coonabarabran; generally in districts east of the above localities cloudy weather prevails, accompanied in the coastal division by cold and rain. The barometers are rising, especially inland, and a strong southerly wind is reported (with rising sea) on the coast. Temora (not in map) reports weather dull. Rain, 0·42.

Queensland.—Fine and clear on E. coast, with light S.W. to S.E. winds, and moderate sea. No rain. Dull at Cooktown.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, E.N.E., 8, fine but cloudy, temperature 55°; Cape Otway, W., 8, fine, but cloudy, moderate sea, temperature 60°; Portland, S.W., 28, fine, but cloudy, smooth sea, temperature 55°; Wilson's Promontory, W., 23, fine, but cloudy, moderate sea, temperature 55°.

New South Wales.—Albury, S.W., cloudy, temperature 58°; Cape St. George, S., 56, raining, heavy sea, temperature [illegible]; Clarence River, S.E., 28, dull, smooth sea, temperature [illegible]; Deniliquin, S., fine, temperature 61°; Dubbo, S.W., [illegible] temperature 62°; Eden, S.W., 14, cloudy, smooth sea, temperature 56°; Goulburn, S., showery, temperature 58°; Menindie, S.W., fine, temperature 59°; Moruya, S., 42, fresh gale, sea is rising, temperature 54°; Newcastle, S.W., 14, raining, moderate sea, temperature 52°; Port Macquarie, S.S.W., showery, smooth sea, temperature 64°; Sydney, S.S.W., 18, raining, smooth sea, temperature 52°; Wentworth, W., fine, temperature 66°.

The very low barometer of Saturday has been followed by a strong inrush of southerly wind, and some rain inland, where most wanted; it has nowhere reached one inch, and the telegrams indicate that the rain is over there, and moving eastward. Up to 9 p.m. 0·45 rain had fallen at Sydney.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 4 inches above summer level; at Hay, 7 feet 11 inches above summer level; at Balranald, 10 feet 2 inches above summer level. Murray: At Albury, 6 feet 7 inches above summer level; at Euston, 11 feet 6 inches above summer level. Darling: At Wentworth, 9 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

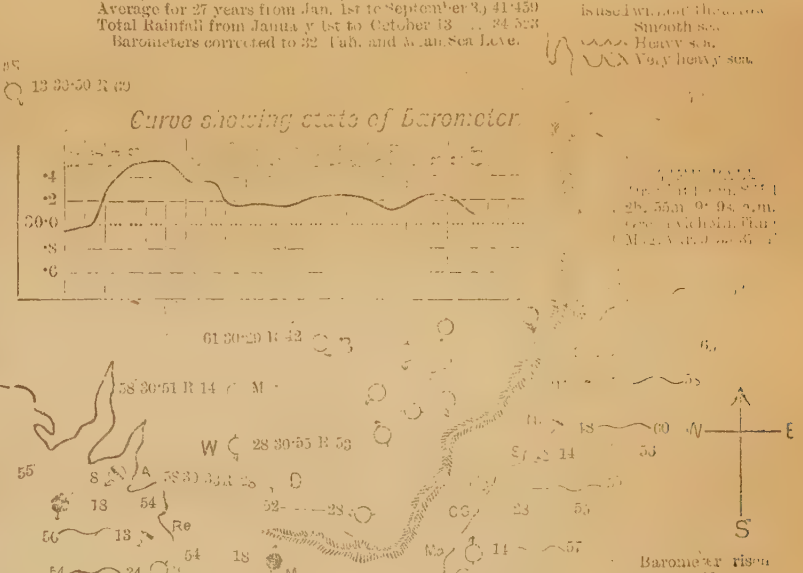
ASTRONOMICAL MEMORANDA FOR OCTOBER 13.

Sun rises at 5.23, sets at 6.10; Moon, 8.58 a.m., 10.34 p.m.; Mercury, 5.23 a.m., 6.1 p.m.; Venus, 7.20 a.m., 9.27 p.m., Mars, 2.32 a.m., 1.0 p.m.; Jupiter, 4.16 a.m., 4.1 p.m.; Saturn, 12.8 a.m., 10.4 p.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, 11.13 a.m., 11.32 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 13, 1885.

Stations	W.T.	M'x	M'n	R'fall
Albury	b	57	5	0
Armidale	o	57	39	0·15
Balranald	b	70	35	0
Bathurst	b	52	35	0·05
Bend'm'r	b	60	32	0·13
Bodalla ..	—	—	—	—
Bourke ..	b	70	43	0
C'md'n H.	b	59	50	0
C. St. Geo.	b	70	45	0·47
Carcoar ..	n	54	38	0
Casino ..	n	80	40	0
Cassilis .	b	61	45	0
Clarence	b	75	49	0·13
C'nd'b'lin	b	51	31	0
Cooma. ..	n	71	26	0·02
Coonab'n	b	65	35	0
C'namble	b	—	—	0
Cowra ..	c	73	56	0·06
Deniliq'n	b	69	35	0
Dubbo ..	b	63	36	0
Eden	c	61	47	0
Euston ..	b	61	38	0
Forbes ..	b	60	37	0·05
Gl'n Inn's	n	54	38	0·41
Goulburn	b	48	35	0·11
Grafton ..	b	72	51	0
Gunned'h	b	67	45	0
Hay	b	66	41	0
Hill End	b	—	—	0
Inverell ..	b	60	37	0
Kiandra	b	50	21	0·09
Lismore	b	80	55	0
Maitland	b	81	50	0·25
Marsdens	b	61	46	0
Menindie	b	60	49	0
Molong ..	b	66	50	0
Moree ..	b	71	42	0
Moruya ..	b	58	40	0·32
Moss Vale	n	48	35	0·80
M. Vict'ria	b	49	33	0·62
Mudgee ..	b	68	35	0
M'rr'mb'h	b	66	38	0·03
M'rr'ndi	b	58	46	0
Mus'lbr'k	b	62	43	0·48
Narrabri	b	83	46	0
Newcastle	c	61	47	0·20
Nowra ..	b	60	41	0·43
Orange ..	b	51	35	0
Picton ..	b	59	42	0·32
P. M'q'rie	c	61	45	0·30
P.St'ph'ns	c	68	47	1·25
Q'nbeyan	f	51	36	0·01
Quirindi	b	79	54	0
Singleton	b	91	52	0·17
SYDNEY ..	b	59	47	0·98
Tamw'rth	b	61	40	0·06
Taralga ..	b	62	—	0·47
Taree	c	65	50	0·30
T'nt'rfield	b	61	37	0
Wagga ..	b	61	35	0
Walcha ..	g	76	36	0·35
Walgett ..	b	65	42	0
W'ntw'rth	b	63	44	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	63	48	0·50
Young ..	b	71	35	0·08



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; R'fall the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather, a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures giving the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown. Pt. Perth, Ay. Albany; Pa. Eucla; CB. Cape Borda, A. Adelaide; Re, Robe, P. Portland, M. Melbourne, WP. Wilson's Promontory; Go. Gabo; E. Eden; Ma, Moruya; CG. Jervis Bay; Wg. Wollongong, S. Sydney; N. Newcastle, PM, Port Macquarie; C. Clarence River; B. Brisbane; R, Rockhampton, Ct. Cooktown. Inland the station barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, with light easterly winds and calms, and smooth sea. No rain.

South Australia.—Reports weather generally fine, but cloudy; scattered clouds north of Burra and West of Cape Borda; winds generally fresh from S.W. to S., veering as far as S.E., and with greater force north of Farina. On the coast the weather is cloudy, with passing showers at Cape Borda, sea smooth barometers steady, but rising. Rainfall: Streaky Bay, 0·02; Robe, 0·01; M'Donnell Bay, 0·01.

Victoria.—Generally cloudy and unsettled on coast, with fresh W. and S.W. wind and rough sea; barometers rising, passing showers, and squally in night; fine and calm at Omeo. Rainfall: Portland, 0·08; Cape Otway, 0·03; Wilson's Promontory, ·05.

Tasmania.—Fine and clear, fresh W.N.W. wind on north coast. No rain.

New Zealand.—Russell, barometer 30·00, generally fine and clear, with light N.W. winds; Wellington, barometer 29·80, generally fine and clear, with light N.W. wind; Bluff, barometer 29·70, generally fine and clear, with light N.W. wind.

New South Wales.—Generally fine and clear, with light to fresh cool southerly winds and falling barometer. It will be seen from the list in map that the rain of yesterday has cleared throughout the colony, only one station (Walcha) reporting gloomy weather. The thermometers generally show a lower temperature than for some time, and at several of the elevated stations both in the N. and S. sharp frosts are reported; Mount Victoria reporting a heavy fall of snow in the night. Port Stephens reports the heaviest rainfall, 1·25, and next to this is Sydney, 0·98. On the coast the sea is moderate, with fresh cool S.W. winds, and rising barometers. Camden (not in map) reports weather fine. Rainfall 0·25.

Queensland. Generally fine on E. coast, with S.W. to S. winds, and calm sea, moderate. [illegible] at Cape Moreton and Rockhampton. Rainfall: Brisbane [illegible].

[illegible] P.M. OBSERVATIONS.

Victoria. Barometer [illegible] Melbourne, S.W., [illegible] temperature [illegible]; Portland, S.W., [illegible] temperature [illegible]; Wilson's Promontory, W.S.W. [illegible] sea, temperature [illegible].

New South Wales. Albury, W., [illegible] Cape St. George, S.E., [illegible] Clarence River, S., [illegible] smooth sea, temperature [illegible]; Dubbo, S.W., [illegible] temperature 63°; Eden, S.W., [illegible] smooth sea, temperature [illegible]; Goulburn, N.W., fine [illegible] 50°; Moruya, S.W., [illegible] temperature 62°; Moss Vale, N.E., 2 [illegible] fine, smooth sea, temperature 61°; Newcastle, S., [illegible] sea, temperature 60°; Sydney, S.E., 10 [illegible] smooth sea, temperature 60°; Wentworth, W., fine, temperature [illegible].

STATE OF RIVERS.

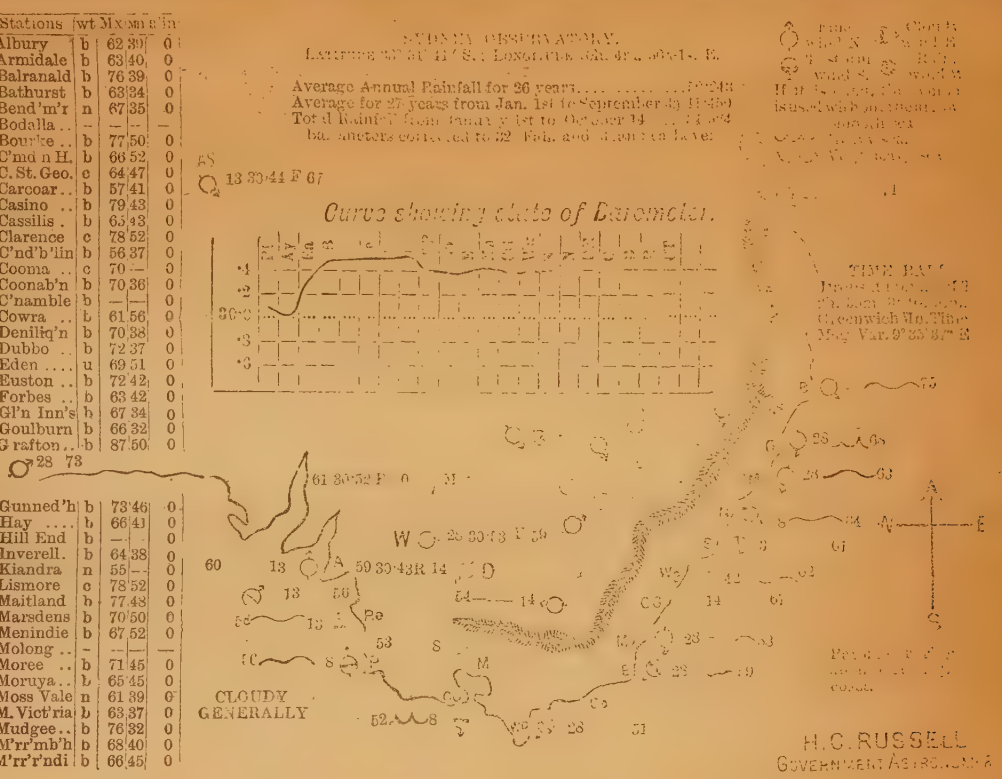
Murrumbidgee: At Wagga [illegible] feet above summer level; at Hay, 6 feet 4 inches above summer level; at Balranald, 10 feet 4 inches above summer level. Murray: At Albury, 6 feet above summer level; at Euston, 11 feet [illegible] inches above summer level. Darling: At Wentworth, 9 feet [illegible] inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL AND MORAL DATA FOR OCTOBER 14.

Sun rises at 5.22, sets at 6.11; Moon, 9.45 a.m., 11.25 p.m.; Mercury, 5.24 a.m., 6.4 p.m.; Venus, 7.20 a.m., 9.[illegible] p.m.; Mars, 2.30 a.m., 12.[illegible] p.m.; [illegible] 5.7 p.m.; Saturn, 12.5 a.m., 10.1 p.m. New moon, 8th; full moon, 24th. High water at Fort Denison, [illegible]

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 14, 1885.

Stations	wt	Mx	Mn	r	in
Albury	b	62	39	0	
Armidale	b	63	40	0	
Balranald	b	76	39	0	
Bathurst	b	63	34	0	
Bend'm'r	n	67	35	0	
Bodalla ..	–	—	—	—	
Bourke ..	b	77	50	0	
C'mdn H.	b	66	52	0	
C. St. Geo.	c	64	47	0	
Carcoar ..	b	57	41	0	
Casino ..	b	79	43	0	
Cassilis .	b	65	43	0	
Clarence	c	78	52	0	
C'nd'b'lin	b	56	37	0	
Cooma ..	c	70	—	0	
Coonab'n	b	70	36	0	
C'namble	b	—	—	0	
Cowra ..	b	61	56	0	
Deniliq'n	b	70	38	0	
Dubbo ..	b	72	37	0	
Eden	u	69	51	0	
Euston ..	b	72	42	0	
Forbes ..	b	63	42	0	
Gl'n Inn's	b	67	34	0	
Goulburn	b	66	32	0	
G'rafton ..	b	87	50	0	
Gunned'h	b	73	46	0	
Hay	b	66	41	0	
Hill End	b	—	—	0	
Inverell.	b	64	38	0	
Kiandra	n	55	—	0	
Lismore	c	78	52	0	
Maitland	b	77	48	0	
Marsdens	b	70	50	0	
Menindie	b	67	52	0	
Molong ..	–	—	—	—	
Moree ..	b	71	45	0	
Moruya ..	b	65	45	0	
Moss Vale	n	61	39	0	
M. Vict'ria	b	63	37	0	
Mudgee ..	b	76	32	0	
M'rr'mb'h	b	68	40	0	
M'rr'r'ndi	b	66	45	0	
Mus'lb'r'k	b	71	41	0	
Narrabri	b	83	41	0	
Newcastle	b	68	51	0	
Nowra ..	c	75	45	0	
Orange ..	b	57	34	0	
Picton ..	b	69	38	0	
P. M'q'rie	b	67	45	0	
P.St'ph'ns	g	72	47	0	
Q'nbeyan	b	64	44	0	
Quirindi	b	83	52	0	
Singleton	b	70	51	0	
SYDNEY ..	g	63	50	0	
Tamw'rth	b	67	39	0	
Taralga ..	b	62	45	0	
Taree	g	71	48	0	
T'nt'rfield	c	69	36	0	
Wagga ..	b	70	38	0	
Walcha ..	n	60	34	0	
Walgett ..	b	71	47	0	
W'ntw'rth	b	70	48	0	
Wilcannia	b	—	—	0	
W'll'ng'ng	c	68	46	0	
Young ..	b	75	38	0	



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rainfall for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, and a symbol showing the state of the sea, and, lastly, figures denoting the sheet temperature at 9 a.m. The barometer curve shows the state of barometers round the coast, from Perth to Cooktown—Pt, Perth; Ay, Albany; Fa, Eucla; CB, Cape Borda; A, Adelaide; Pe, Port Pirie; Pt, Portland; M, Melbourne; W P, Wilson's Promontory; Co, Cape Otway; Ma, Mornington; C, Corner Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depression, beginning with Western Australia, and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, but cloudy, with light E. and S. winds and smooth sea. No rain.

South Australia reports weather generally fine and clear; few scattered clouds over Mount Lofty ranges and on coast; wind generally light from E. and N.; sea smooth; barometers steady. Rainfall: Robe, 0·03.

Victoria.—Cloudy on coast, with moderate sea; rising barometers and light southerly winds; fine and clear, with fresh S.W. wind at Echuca. Rainfall: Melbourne, 0·01; Portland, 0·02; Cape Otway, 0·01.

Tasmania.—Fine and clear; light W. wind on N. coast.

New Zealand.—Russell, barometer 29·80, wind S.W., showery, Wellington, barometer 29·59, wind W., fine; rainfall, 1·15, all in night. Bluff, barometer 29·50, wind S.W., fine.

New South Wales.—Fine and clear throughout, with light variable southerly winds and calms and rising barometer. Moderate sea and light S. winds on coast. No rain.

Queensland.—Generally fine and clear on E. coast, with light S.E. winds and moderate sea. Dull, with rather rough sea, at Townsville. No rain.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., fine, temperature 64°; Cape St. George, S.S.E., 14, fine, smooth sea, temperature 63°; Clarence River, S., 28, fine, moderate sea, temperature 68; Deniliquin, S., fine, temperature 63°; Dubbo, W., [illegible], Goulburn, [illegible], fine, temperature 63°; [illegible] temperature 61°; Newcastle, S.E., 8, dull [illegible] temperature 61°; Port Macquarie, [illegible], fine, [illegible] temperature [illegible]; Sydney, E., 8, fine, smooth sea, temperature [illegible]; Wagga, N.W., fine, temperature 6[illegible].

Victoria.—Melbourne, S.W., 13, fine, temperature [illegible]; Cape Otway, S.S.E., dull, rough sea, temperature [illegible]; [illegible], 13, fine, moderate sea, temperature 58°; [illegible], W., 23, cloudy, moderate sea, temperature 57°.

RIVER OF RAIN.

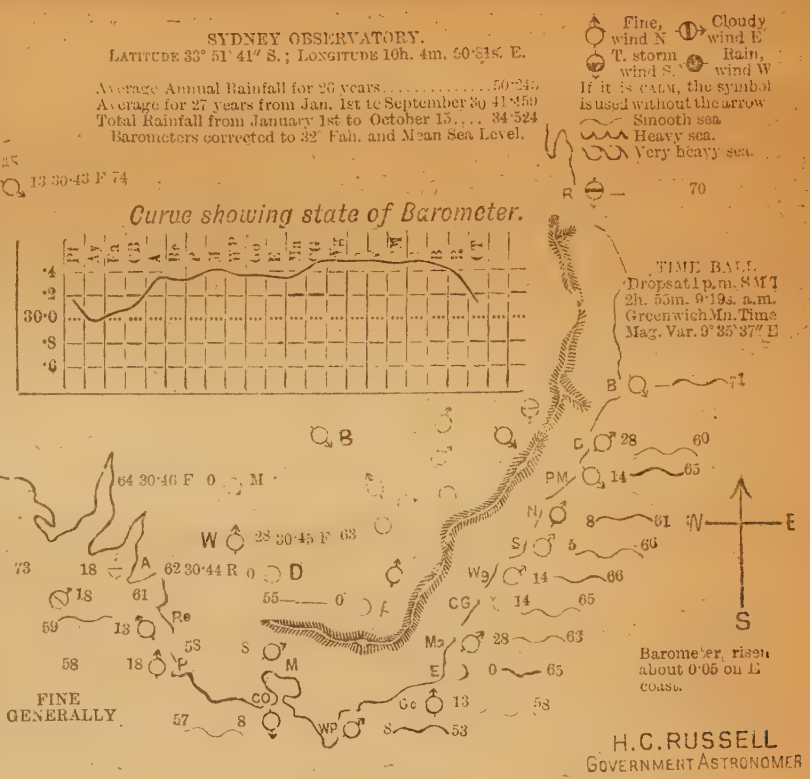
Murrumbidgee: At Wagga, 4 feet above summer level; at [illegible], 5 feet 10 inches above summer level; at [illegible] above summer level. Murray: At Albury, [illegible] above summer level; at [illegible] 11 feet [illegible] above summer level. Darling: At Wentworth, [illegible] feet 3 inches [illegible]; at Poonaarie, Menindie, [illegible].

ASTRONOMICAL MEMORANDA FOR [illegible].

Sun rises at 5.21, sets at 6.12; Moon, [illegible] a.m., [illegible], 5.21 a.m., 6.8 p.m.; Venus, 7.20 a.m., [illegible] p.m.; [illegible] a.m., 12.57 p.m.; Jupiter, 4.19 a.m., [illegible] p.m.; [illegible] 12.1 a.m., 9.57 a.m. New moon, [illegible] full moon, 27th. High water at Port Denison, 12.1[illegible] a.m., 12.34 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 15, 1889.

Stations	wt	Mx	Mn	R in
Albury	b	76	40	0
Armidale	b	60	49	0
Balranald	b	86	35	0
Bathurst	b	74	40	0
Bend'm'r	b	76	52	0
Bodalla ..	b	68	38	0
Bourke ..	b	86	53	0
C'md'n H.	b	68	53	0
C. St. Geo.	b	66	50	0
Carcoar ..	b	62	48	0
Casino ..	b	79	50	0
Cassilis ..	b	67	54	0
Clarence	c	79	51	0·41
C'nd'b'lin	b	64	40	0
Cooma ..	n	75	30	0
Coonab'n	b	80	41	0
C'namble	b	—	—	0
Cowra ..	b	66	58	0
Deniliq'n	b	77	40	0
Dubbo ..	b	81	51	0
Eden	c	64	47	0
Euston ..	b	83	40	0
Forbes ..	b	72	43	0
Gl'n Inn's	c	73	59	0
Goulburn	b	78	43	0
Grafton ..	c	82	62	0
Gunned'h	b	79	54	0
Hay	b	73	51	0
Hill End	b	—	—	0
Inverell ..	b	62	46	0
Kiandra	n	63	23	0
Lismore	c	75	54	0
Maitland	b	73	46	0
Marsdens	b	80	54	0
Menindie	b	74	52	0
Molong ..	b	71	44	0
Moree ..	b	85	55	0
Moruya ..	b	66	48	0
Moss Vale	b	64	47	0
M. Vict'ria	b	65	44	0
Mudgee ..	b	78	45	0
M'rr'mb'h	b	77	47	0
M'rr'r'ndi	c	70	51	0
Mus'lbr'k	b	74	43	0
Narrabri	b	80	39	0
Newcastle	b	69	58	0
Nowra ..	—	—	—	—
Orange ..	b	66	42	0
Picton ..	b	66	48	0
P. M'q'rie	b	68	50	0
P.St'ph'ns	b	77	46	0·10
Q'nbeyan	b	65	49	0
Quirindi	b	88	60	0
Singleton	b	70	51	0
SYDNEY ..	c	67	59	0
Tamw'rth	b	76	50	0
Taralga ..	b	80	46	0
Taree	b	72	50	0
T'nt'rfield	c	72	50	0
Wagga ..	b	77	44	0
Walcha ..	c	65	46	0
Walgett ..	b	74	52	0
W'ntw'rth	b	78	50	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	68	54	0
Young ..	b	82	45	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquerie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light S.W. and S.E. winds and smooth sea. Dull at Geraldton and Albany. Rainfall: Geraldton, 0·18; Albany, 0·05; Esperance Bay, 0·08.

South Australia reports weather generally fine and warm with S.E. and N. winds, smooth sea, and falling barometers on coast. No rain. Dull and squally at Eucla.

Victoria.—Fine and clear throughout; light northerly falling barometers and smooth sea on coast; light S.W. wind and rising barometer inland at Echuca; heavy dew in night at Melbourne. No rain.

Tasmania.—Cloudy on N. coast with light W.S.W. wind.

New South Wales.—Fine and clear, with light northerly winds and calms and rising barometers. Smooth sea and light S.E. winds on coast. Calm inland.

Queensland.—Generally fine on coast, with S.E. winds (fresh up north) and moderate sea. Showery at Townsville, but no rain measured.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 18, fine, temperature 75°; Cape Otway, E., 8, dull, slight sea, temperature 68°; Portland, N.W., 22, fine, smooth sea, temperature 72°; Wilson's Promontory, N.E., fine, smooth sea, temperature 66°.

New South Wales.—Albury, W., fine, temperature 68°; Cape St. George, N.E., 56, fine, smooth sea, temperature 65°; Clarence River, S.E., fine, moderate sea, temperature 70°; Deniliquin, calm, fine, temperature 63°; Dubbo, N.E., fine, temperature 70°; Eden, N.E., 14, fine, smooth sea, temperature 63°; Goulburn, calm, fine, temperature 63; Menindie, calm, fine, hot, temperature 70°; Moruya, N.E., 28, fine, moderate sea, temperature 65°; Port Macquarie, S.E., 28, fine, smooth sea, temperature 73°; Sydney, E.N.E., 8, fine, smooth sea, temperature 64°; Wentworth, calm, fine, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet 3 inches above summer level; at Hay, 5 feet 2 inches above summer level; at Balranald, 10 feet above summer level. Murray: At Albury, 6 feet 10 inches above summer level; at Euston, 12 feet above summer level. Darling: At Wentworth, 9 feet 9 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 16.

Sun rises at 5.19, sets at 6.12; Moon, 11.24 a.m., sets at 12.10 a.m.; Mercury, 5.24 a.m., 6.12 p.m.; Venus, 7.20 a.m., 9.34 p.m.; Mars, 2.26 a.m., 12.56 p.m.; Jupiter, 4.6 a.m., 3.51 p.m.; Saturn, 11.57 p.m., 9.53 a.m. New moon, 8th; full moon, 24th. High water at Fort Denison, 12.55 a.m., 1.21 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 17.

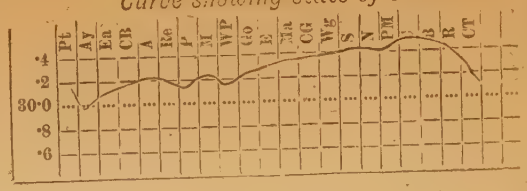
Stations	WT	Mx	Mn	R'n
Albury	c	89 50		0
Armidale	b	69 45		0
Balranald	g	96 43		0
Bathurst	b	75 40		0
Bend'm'r	b	73 42		0
Bodalla ..	b	73 42		0
Bourke ..	b	97 53		0
C'md'n H.	b	70 54		0
C. St. Geo.	c	67 53		0
Corcoar ..	b	67 48		0
Casino ..	b	77 45		0
Cassilis .	b	71 30		0
Clarence	c	79 57		0
C'nd'b'lin	b	63 44		0
Cooma ..	c	81 38		0
Coonab'n	b	82 43		0
C'namble	b	—	—	0
Cowra ..	b	71 62		0
Deniliq'n	c	87 47		0
Dubbo ..	b	83 48		0
Eden	b	64 52		0
Euston ..	b	91 49		0
Forbes ..	b	82 50		0
Gl'n Inn's	b	80 46		0
Goulburn	b	77 39		0
Grafton ..	c	82 62		0
		8 70		
Gunned'h	b	82 55		0
Hay	c	82 48		0
Hill End	b	—	—	0
Inverell ..	b	73 45		0
Kiandra	n	64 28		0
Lismore	b	75 54		0
Maitland	b	71 50		0
Marsdens	b	82 57		0
Menindie	b	79 58		0
Molong ..	b	79 49		0
Moree ..	b	87 57		0
Moruya ..	c	68 50		0
Moss Vale	b	66 44		0
M. Vict'ria	b	73 48		0
Mudgee ..	b	85 40		0
M'rr'mb'h	b	79 47		0
M'rr'r'ndi	b	71 50		0
Mus'lb'r'k	b	76 43		0
Narrabri	b	84 46		0
Newcastle	b	71 54		0
Nowra ..	—	—	—	—
Orange ..	b	67 41		0
Picton ..	b	74 43		0
P. M'q'rie	b	63 48		0
P.St'ph'ns	b	78 48		0
Q'nbeyan	b	69 49		0
Quirindi	b	90 60		0
Singleton	b	69 51		0
SYDNEY ..	b	68 55		0
Tamw'rth	b	75 49		0
Taralga ..	b	81 41		0
Tarce	b	76 50		0
T'nt'rfield	b	76 46		0
Wagga ..	b	86 45		0
Walcha ..	f	69 48		0
Walgett ..	b	85 56		0
W'ntw'rth	c	86 56		0
Wilcannia	b	—	—	0
W'li'ng'ng	c	73 53		0
Young ..	c	84 46		0

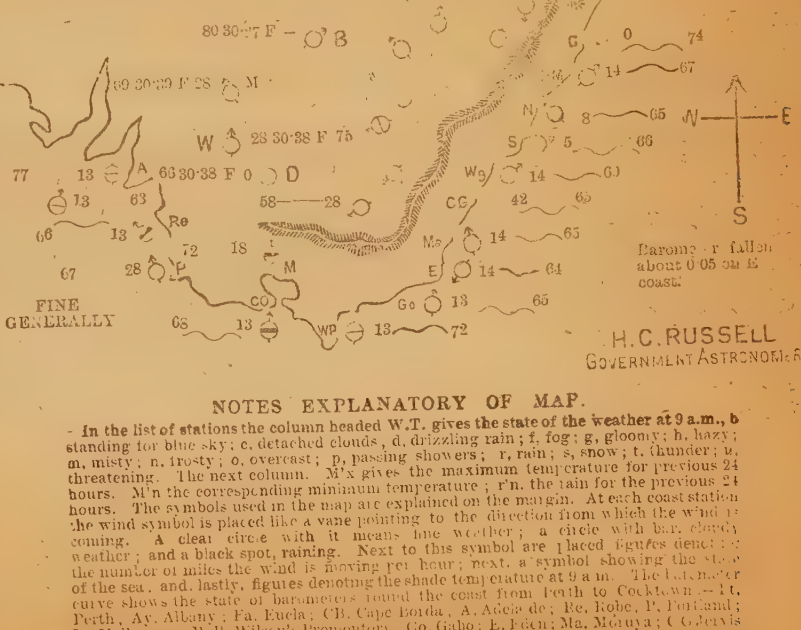
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 56 21 E.

Average Annual Rainfall for 26 years ..... 56·23
Average for 27 years from Jan. 1st to September 30 ... 41·959
Total Rainfall from January 1st to October 16 ... 34·54
Barometer corrected to 32° Fah. and at sea level.

Curve showing state of Barometer.





H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds, d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown.—Ec. Perth, Ay, Albany; Fa, Eucla; CB, Cape Borda, A, Adelaide; Ec, Robe, P, Portland; M, Melbourne, WP, Wilson's Promontory, Co, Gabo; E, Eden; Ma, Moruya; G, Jervis Bay; Wg, Wollongong, S, Sydney, N, Newcastle, PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with light variable winds and smooth sea; dull at Perth. Rainfall, 0·03.

South Australia reports weather generally sultry and warm, with scattered clouds; fine and clear N. of Peake; winds from N.E. to N., and light; smooth sea and falling barometers on coast; fine in Northern Territory; no rain.

Victoria.—Generally fine, but cloudy, on coast; wind light from N., barometers falling, sea smooth, no rain; hot wind in squalls at Wilson's Promontory.

Tasmania.—Fine, but cloudy on N. coast, with light N.E. wind.

New Zealand.—Russell, barometers 30·20; Wellington, 30·10; Bluff, 30·10. Generally fine, with light S.W. winds; rough sea on west coast.

New South Wales.—Fine clear weather throughout colony; light scattered clouds in places on coast; wind generally calm and light from N.W. to N.E.; barometers falling; smooth sea and light winds on coast. Details in map above.

Queensland.—Fine and clear on E. coast, with S.E. winds (fresh in N.) and moderate sea; no rain; rather rough sea at Townsville.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., 18, fine, hot, barometer falling, temperature 81°; Cape Otway, W.N.W., 6, gloomy, hot, smooth sea, temperature 82°; Portland, W., 30, cloudy, hot, smooth sea, temperature 81°; Wilson's Promontory, N., 12, fine, hot, smooth sea, temperature 82°.

New South Wales.—Albury, S.W., fine, hot, temperature 7[illegible]; Cape St. George, N.E., 40, fine, smooth sea, temperature 71; Deniliquin, calm, fine, temperature 60°; Dubbo, N.E., fine, temperature 73°; Forbes, N.E., fine, smooth sea, temperature 64°; Goulburn, calm, fine, temperature 66°; Menindie, N., cloudy, temperature 80°; Moruya, N.E., 12, hazy, fine, smooth sea, temperature 63°; Newcastle, N.E., 10, fine, smooth sea, temperature 68°; Port Macquarie, N.E., 18, fine, smooth sea, temperature 72°; Sydney, N.E., 20, fine, smooth sea, temperature 71°; Wentworth, N., cloudy, temperature 73°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 5 feet above summer level; at Hay, 5 feet above summer level; at Balranald, 10 feet above summer level. Murray: At Albury, 6 feet 9 inches above summer level; at Euston, 12 feet above summer level. Darling: At Wentworth, 9 feet 10 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 17.

Sun rises at 5.18, sets at 6.13; Moon, 12.16 p.m., sets 12.54 a.m.; Mercury, 5.24 a.m., 6.17 p.m.; Venus, 7.20 a.m., 9.36 p.m.; Mars, 2.23 a.m., 12.55 p.m.; Jupiter, 4.3 a.m., 3.48 p.m.; Saturn, 11.53 p.m., 9.49 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, 1.46 a.m., 2.17 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 17, 1885.

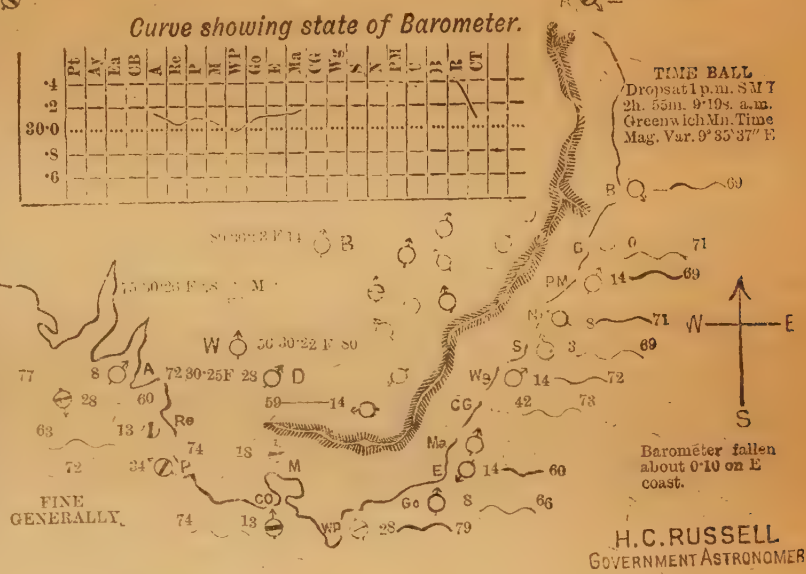
Stations	W.T.	Max	Min	R'fall
Albury	b	85	50	0
Armidale	b	74	47	0
Balranald	c	101	55	0
Bathurst	b	82	42	0
Bend'm'r	b	75	44	0
Bodalla	b	84	43	0
Bourke	b	98	64	0
C'md'n H.	b	72	59	0
C. St. Geo.	b	75	58	0
Carcoar	b	70	54	0
Casino	—	—	—	—
Cassilis	b	75	56	0
Clarence	b	81	57	0
C'nd'b'lin	g	77	55	0
Cooma	c	85	36	0
Coonab'n	b	85	42	0
C'namble	b	—	—	0
Cowra	b	76	62	0
Deniliq'n	c	92	54	0
Dubbo	—	—	—	—
Eden	c	69	55	0
Euston	c	101	49	0
Forbes	b	88	52	0
Gl'n Inn's	b	79	44	0
Goulburn	b	83	40	0
Grafton	b	86	64	0
Gunned'h	b	85	55	0
Hay	g	89	60	0
Hill End	b	—	—	0
Inverell	b	75	46	0
Kiandra	c	68	33	0
Lismore	c	83	53	0
Maitland	b	78	52	0
Marsdens	b	86	61	0
Menindie	c	89	68	0
Molong	b	85	43	0
Moree	b	87	57	0
Moruya	b	74	50	0
Moss Vale	b	—	—	0
M. Vict'ria	b	76	48	0
Mudgee	b	87	41	0
M'rr'mb'h	b	94	50	0
M'rr'ndi	b	77	55	0
Mus'lb'r'k	b	85	67	0
Narrabri	b	87	49	0
Newcastle	b	73	57	0
Nowra	—	—	—	—
Orange	b	71	43	0
Picton	b	81	45	0
P. M'q'rie	b	72	52	0
P.St'ph'ns	b	79	58	0
Q'nbeyan	b	74	50	0
Quirindi	c	85	60	0
Singleton	b	80	52	0
SYDNEY	b	73	56	0
Tamw'rth	—	—	—	0
Taralga	b	84	43	0
Taree	b	81	51	0
T'nt'rfield	b	79	42	0
Wagga	b	89	48	0
Walcha	b	74	42	0
Walgett	b	88	58	0
W'ntw'rth	c	94	59	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	75	56	0
Young	b	88	48	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 17.... 34·524
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow.
Smooth sea
Heavy sea.
Very heavy sea.



Barometer fallen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to thi symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light S.E. winds and seas, and smooth sea. Rain, Albany 0·01.

South Australia reports weather generally fine and warm, and sultry, with light and scattered clouds; winds light to fresh, and from N.E. to N.W.; smooth sea and steady barometers on coast. No rain.

Victoria.—Generally fine, but cloudy, with hot northerly winds and falling barometers; smooth sea on coast; fierce squalls of hot N. wind at Wilson's Promontory. No rain. Fine and clear inland at Echuca.

Tasmania.—Dull on N. coast, with light N.N.E. breeze.

New Zealand.—Russell, barometers 30·30, wind S.W., dull; Wellington, 30·10, wind N.W., fine; Bluff, 30·00, wind calm, fine.

New South Wales.—Fine and clear throughout, with light northerly winds and calm; warm and calm inland, the thermometer westward on the Darling registering 80° in the shade at 9 a.m., and showing at two of the stations a maximum temperature for yesterday of 101°; light northerly winds, smooth sea, and falling barometers on coast. Details in map above.

Queensland.—Generally fine and clear on east coast, with S.E. wind and moderately rough sea; dull at Cooktown, with strong wind. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, W., 6, misty, sea smooth, temperature 64°; Portland, S.W., 30, cloudy, sea smooth, temperature 60°; Wilson's Promontory, N.W., 36, hot wind, like a change, sea smooth, temperature 75°.

New South Wales.—Albury, W., fine, temperature 66; Cape St. George, N., 14, fine, sea moderate, temperature 75°; Deniliquin, N.W., fine, temperature 83°; Dubbo, N., fine, temperature 75°; Eden, N.E., 14, fine, little sea, temperature 79°; Goulburn, N.N.W., fine, temperature 69°; Menindie, N.W., 20, cloudy, hot, temperature 82°; Moruya, N.W., 40, cloudy, sea smooth, temperature 88°; Newcastle, N.E., fine, sea moderate, temperature 71°; Port Macquarie, N.N.E., 40, fine, sea smooth, temperature 72°; Sydney, N.E., 20, fine, sea smooth, temperature 71°; Wentworth, N.W., fine, hot, temperature 83°

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 6 inches above summer level; at Hay, 4 feet 10 inches above summer level; at Balranald, 10 feet above summer level. **Murray:** At Albury, 7 feet 4 inches above summer level; at Euston, 12 feet 7 inches above summer level. **Darling:** At Wentworth, 10 feet 1 inch above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 19.

Sun rises at 5.16, sets at 6.15; Moon, 2.4 p.m., sets at 2.11 a.m.; Mercury, 5.24 a.m., 6.25 p.m.; Venus, 7.20 a.m., 9.40 p.m.; Mars, 2.19 a.m., 12.53 p.m.; Jupiter, 3.56 a.m., 3.42 p.m.; Saturn, 11.45 p.m., 9.41 a.m. New moon, 8th; full moon, 24th.

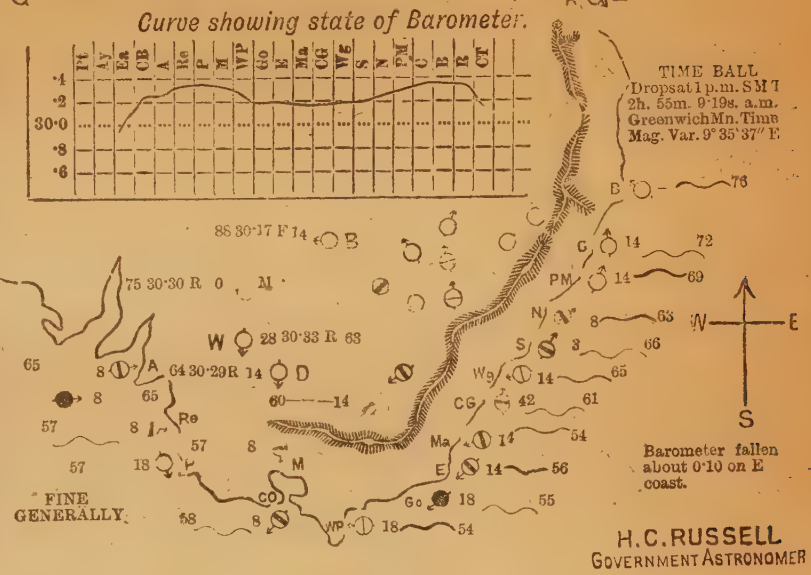
High water at Fort Denison—3.53 a.m., 4.27 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 19, 1889.

Stations	wt	Mx	Mn	r'in
Albury	c	89	47	0
Armidale	b	80	50	0
Balranald	b	101	47	0
Bathurst	g	84	48	0
Bend'm'r	b	81	49	0
Bodalla ..	g	96	53	0·12
Bourke ..	c	105	67	0
C'md'n H.	b	79	61	0
C. St. Geo.	c	66	57	0
Carcoar ..	g	74	56	0
Casino ..	b	88	46	0
Cassilis .	c	84	54	0
Clarence	b	81	59	0
C'nd'b'lin	g	72	55	0
Cooma ..	g	77	44	0·02
Coonab'n	g	90	50	0
C'namble	c	—	—	0
Cowra ..	c	79	69	0
Deniliq'n	b	97	44	0
Dubbo ..	c	92	66	0·02
Eden	u	64	45	0·05
Euston ..	b	92	52	0
Forbes ..	b	92	62	0
Gl'n Inn's	b	87	46	0
Goulburn	c	85	52	0·03
Grafton ..	b	97	65	0
Gunned'h	b	88	60	0
Hay	b	87	54	0
Hill End	b	—	—	0
Inverell ..	b	77	47	0
Kiandra	b	68	47	0
Lismore	b	89	57	0
Maitland	u	90	56	0·04
Marsdens	c	86	68	0
Menindie	b	88	69	0
Molong ..	c	82	60	0
Moree ..	b	92	58	0
Moruya ..	g	67	55	0·05
Moss Vale	u	70	52	0·09
M. Vict'ria	g	79	49	0·02
Mudgee ..	g	91	42	0
M'rr'mb'h	c	83	59	0·01
M'rr'r'ndi	c	82	60	0
Mus'lb'r'k	c	94	56	0
Narrabri	b	90	57	0
Newcastle	g	82	59	0·03
Nowra ..	b	70	54	0·02
Orange ..	g	78	53	0
Picton ..	u	85	59	0·03
P. M'q'rie	b	75	57	0
P.St'ph'ns	g	75	59	0·05
Q'nbeyan	c	80	55	0
Quirindi	c	89	49	0
Singleton	b	90	62	0
SYDNEY ..	g	79	59	0·07
Tamw'rth	b	86	55	0
Taralga ..	b	83	54	0
Taree	g	89	61	0
T'nt'rfield	b	88	46	0
Wagga ..	c	92	55	0
Walcha ..	b	78	48	0
Walgett ..	b	95	60	0
W'ntw'rth	c	80	56	0
Wilcannia	c	—	—	0
W'll'ng'ng	g	74	59	0·08
Young ..	c	91	55	0·02

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 19.... 34·590
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquerie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally cloudy and dull, scattered clouds in S.E., winds generally S E. to N.E. and light, smooth sea, steady barometers, light easterly winds, and dull gloomy weather on S. coast; showery at Cape Borda. Rainfall: Eucla, 0·01 (thunderstorm at 1 a.m.).

Victoria.—Generally fine, but cloudy both on coast and inland, with light southerly winds and calms and steady barometers. No rain reported. Moderate sea on coast.

New Zealand.—Russell, barometers 30·30, wind N.W., fine; Wellington, barometer 29·10, wind N.W., fine, gusty in night; Bluff, barometer 29·80, wind S.W., 34, dull.

New South Wales.—Generally fine, cloudy in S. and on coast S. of Newcastle; smooth sea, falling barometers, and light variable winds on coast. Generally calm inland. Details in map above.

Queensland.—Generally fine and clear, with moderate sea; S.E. winds in N., and N.W. winds in S. No rain.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, temperature 70; Clarence River, N.E., fresh, sea smooth, temperature 74°; Deniliquin, calm, fine, temperature 67°; Dubbo, S.W., 14, fine, temperature 79°; Eden, S.E., 14, fine, smooth sea, temperature 62°; Newcastle, N.E., 8, light, sea smooth, temperature 68°; Port Macquarie, N.N.E., 28, cloudy, sea smooth, temperature 74°; Sydney, N.E., 8, scattered clouds, sea smooth, temperature 68°; Walgett, S.W., 28, fine, hot, temperature 77°.

Victoria.—Melbourne, S.S.W., 13, fine, temperature 58°; Cape Otway, S.W., 8, fine but cloudy, sea moderate, temperature 58°; Portland, S.E., 13, fine, sea slight, temperature 58°; Wilson's Promontory, S.W., 34, fine, sea moderate, temperature 56°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 4 inches above summer level; at Hay, 4 feet 2 inches above summer level; at Balranald, 10 feet above summer level. Murray: At Albury, 6 feet above summer level; at Euston, 13 feet 2 inches above summer level. Darling: At Wentworth, 10 feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 19.

Sun rises at 5.14, sets at 6.16; Moon rises 3 p.m., sets at 2.48 a.m.; Mercury, 5.24 a.m., 6.29 p.m.; Venus, 7.20 a.m., 9.42 p.m.; Mars, 2.17 a.m., 12.52 p.m.; Jupiter, 3.52 a.m., 3.39 p.m.; Saturn, 11.41 p.m., 9.37 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison—5.1 a.m., 5.31 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 20, 1888.

Stations	wt	Mx	Mn	R'in
Albury	u	78	46	0
Armidale	b	82	53	0
Balranald	g	98	54	0
Bathurst	b	79	43	0
Bend'm'r	b	81	49	0
Bodalla ..	g	68	51	0
Bourke ..	b	99	66	0
C'md'n H.	c	75	65	0
C. St. Geo.	c	66	56	0
Carcoar ..	b	72	53	0
Casino ..	b	96	58	0
Cassilis .	b	81	59	0
Clarence	b	81	60	0
C'nd'b'lin	g	73	53	0
Cooma ..	g	78	36	0
Coonab'n	c	88	49	0
C'namble	b	—	—	0
Cowra ..	b	77	70	0
Deniliq'n	u	81	47	0
Dubbo ..	c	88	53	0
Eden	u	66	52	0
Euston ..	g	94	63	0
Forbes ..	b	82	53	0
Gl'n Inn's	b	86	47	0
Goulburn	b	73	44	0
Grafton ..	b	96	68	0
Gunned'h	b	88	62	0
Hay	c	87	54	0
Hill End	b	—	—	0
Inverell ..	b	80	51	0
Kiandra	u	66	20	0
Lismore	b	92	60	0
Maitland	u	86	63	0·05
Marsdens	b	86	61	0
Menindie	g	88	66	0
Molong ..	b	86	50	0
Moree ..	b	96	58	0
Moruya ..	g	69	56	0
Moss Vale	g	71	52	0
M. Vict'ria	g	73	49	0
Mudgee ..	g	87	48	0
M'rr'mb'h	b	85	43	0
M'rr'r'ndi	c	79	57	0
Mus'lbr'k	b	89	56	0
Narrabri	b	95	60	0
Newcastle	g	78	62	0·17
Nowra ..	c	76	56	0·05
Orange ..	b	75	43	0
Picton ..	g	83	52	0·02
P. M'q'rie	c	78	64	0
P.St'ph'ns	g	74	61	0·07
Q'nbeyan	c	76	51	0
Quirindi	b	88	58	0
Singleton	u	86	64	0
SYDNEY ..	g	74	61	0·01
Tamw'rth	—	—	—	—
Taralga ..	b	76	52	0
Tarée	g	84	62	0·07
T'nt'rfield	b	86	49	0
Wagga ..	c	83	39	0
Walcha ..	b	78	46	0
Walgett ..	c	95	61	0
W'nt'w'rth	g	86	53	0
Wilcannia	b	—	—	0
W'll'ng'ng		75	57	0
Young ..	c	91	44	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 20.... 34·596
Barometers corrected to 32° Fah. and Mean Sea Level.

H.C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally cloudy and dull and sultry; hot inland to Charlotte; winds generally fresh, and from N.E. to N.W.; smooth sea, falling barometers, and light N.E. winds on S. coast; fine in Northern Territory. No rain.

Victoria.—Generally cloudy, light easterly winds, falling barometers, and smooth sea on coast; S.S.W. winds and calm inland. No rain.

Tasmania.—Fine and clear on N. coast; fresh N.E. wind.

New Zealand.—Russell, barometer 30·20, wind N.W., fine; Wellington, barometer 29·70, wind N.W., fine; Bluff, barometer 29·10, wind S.W., 28, showery; strong S.W. wind on W. coast.

New South Wales.—Generally fine, but cloudy; clear in places. (See Map above.) No rain falling; measurements in Map. Winds generally light, from S.E. to N.E., and calm inland. Smooth sea, rising barometer, and light E. to S.W. winds on coast. Splendid meteor seen at Canonbar, 7.30 p.m. on 19th, moving from N.E. to W.; had a train and an exceedingly brilliant nucleus.

Queensland.—Generally fine and clear on E. coast, with light S.E. winds in N. and N.W.; in S. sea moderate. Rain Cooktown, 0·10, with rough sea.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., cloudy, temperature 68; Cape St. George, N.E., 28, fine, sea moderate, temperature 66°; Clarence River, S., fresh, fine, sea smooth, temperature 73°; Deniliquin, S., fine, temperature 71°; Dubbo, fine, temperature 78°; Eden, E., fine, smooth sea, temperature 60°; Goulburn, calm, fine, temperature 69°; Menindie, N., fine, temperature 77°; Moruya, N.E., 28, fine, sea smooth, temperature 66°; Port Macquarie, S.S.E., 28, cloudy, sea smooth, temperature 76°; Sydney, E.N.E., 8, scattered clouds, sea smooth, temperature 64°; Wentworth, N., cloudy, temperature 78°.

Victoria.—Melbourne, S.W., 13, cloudy, temperature 61°; Cape Otway, E., 13, dull, sea slight, temperature 55°; Portland, E.S.E., 34, cloudy, sea slight, temperature 60°; Wilson's Promontory, E., 13, cloudy, sea slight, temperature 61°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 4 inches above summer level; at Hay, 3 feet 6 inches above summer level; at Balranald, 8 feet 8 inches above summer level. Murray: At Albury, 5 feet 7 inches above summer level; at Euston, 13 feet 6 inches above summer level. Darling: At Wentworth, 10 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 21.

Sun rises at 5.13, sets at 6.17; Moon rises 3·56 p.m., sets at 3.22 a.m.; Mercury, 5.24 a.m., 6.34 p.m.; Venus, 7.20 a.m., 9.44 p.m.; Mars, 2.14 a.m., 12.50 p.m.; Jupiter, 3.49 a.m., 3.37 p.m.; Saturn, 11.37 p.m., 9.33 a.m. New moon, 8th; full moon, 24th.

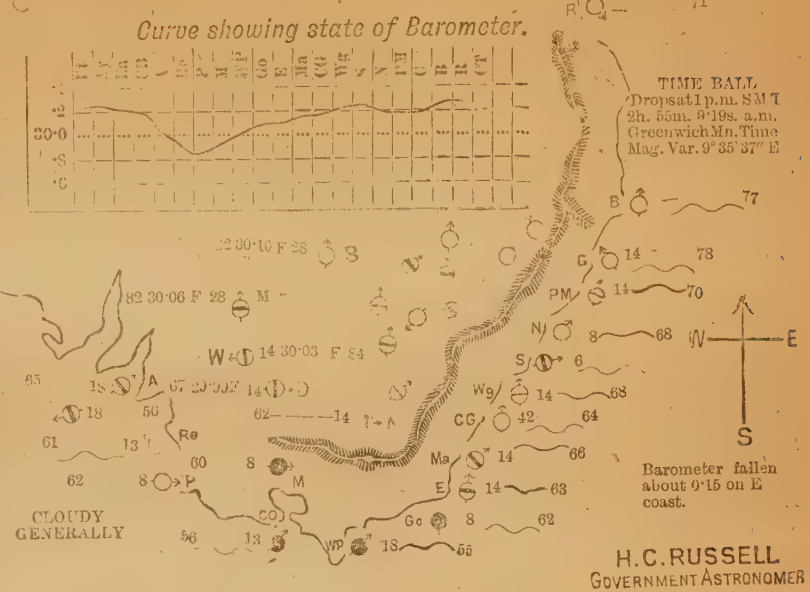
High water at Port Denison—6.1 a.m., 6.26 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 21, 1887

Stations	wt	Mx	Mn	R'fn
Albury	u	78 57		0
Armidale	b	88 59		0
Balranald	c	97 61		0
Bathurst	p	81 52		0
Bend'm'r	b	83 50		0
Bodalla	g	72 51		0
Bourke	c	107 76		0
C'md'n H.	b	71 64		0
C. St. Geo.	b	67 58		0
Carcoar	u	72 60		0
Casino	b	91 56		0
Cassilis	b	80 61		0
Clarence	b	83 64		0
C'nd'b'lin	g	77 58		0
Cooma	u	72 47		0
Coonab'n	c	90 50		0
C'namble	b	—	—	0
Cowra	p	75 69		0
Deniliq'n	u	85 57		0
Dubbo	b	92 61		0
Eden	g	64 54		0
Euston	c	97 66		0
Forbes	b	82 55		0
Gl'n Inn's	c	82 49		0
Goulburn	g	81 48		0
Grafton	b	98 61		0
Gunned'h	c	90 66		0
Hay	c	84 61		0
Hill End	b	—	—	0
Inverell	b	82 54		0
Kiandra	—	—	—	—
Lismore	c	86 64		0
Maitland	g	83 60		0
Marsdens	u	82 66		0
Menindie	g	96 76		0
Molong	c	86 58		0
Moree	c	100 64		0
Moruya	g	74 56		0
Moss Vale	d	61 51		0
M. Vict'ria	g	74 50		0
Mudgee	b	90 52		0
M'rr'mb'h	c	78 56		0
M'rr'r'gil	b	73 59		0
Mus'lbr'k	b	83 54		0
Narrabri	b	94 59		0
Newcastle	c	71 61		0
Nowra	g	72 54		0
Orange	g	74 51		0
Picton	d	76 58		0·02
P. M'q'rie	c	74 61		0
P.St'ph'ns	b	73 60		0
Q'nbeyan	g	72 56		0
Quirindi	b	87 52		0
Singleton	b	73 61		0
SYDNEY	g	67 60		0
Tamw'rth	—	—	—	0
Taralga	u	83 58		0
Taree	c	81 64		0
T'nt'rfield	c	87 48		0
Wagga	u	78 59		0
Walcha	c	80 51		0
Walgett	b	97 68		0
W'ntw'rth	c	96 73		0
Wilcannia	b	—	—	0
W'll'ng'ng	g	73 51		0
Young	u	85 47		0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 21.... 34·596
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with light E. and S.E. winds. Light rain falling at Esperance Bay, 0·23; ditto at Albany, 0·02; Perth, 0·07.

South Australia reports weather generally cloudy inland to Port Charlotte; dull on and near coast; showery in places; scattered winds in S.E.; winds generally N.W. to S.W., and fresh. Rainfall: Eucla, 0·01; C. Borda, 0·11; Adelaide, 0·03; Robe, 0·10; Port Donnell Bay, 0·14. Moderate sea and rising barometers on coast.

Victoria.—Generally cloudy and dull. Showery on coast, with light N.E. winds, falling barometers, and smooth sea. Rainfall: Melbourne, 0·14; Portland, 0·13; Cape Otway, 0·17; Wilson's, [illegible]; Lake Entrance, 0·09; Omeo, 0·06.

Tasmania.—Dull on N. coast, with light E. wind.

New Zealand.—Russell, barometer 30·10, wind S.W., fine; Wellington, barometer 30·, wind S.E., fine; Bluff, barometer 30·30; wind W., 28, passing showers.

New South Wales.—Generally fine, but cloudy; showery at Bathurst and Cowra, and drizzling at Picton; smooth sea and falling barometers on coast. (Details in map.) Calm inland.

Queensland.—Fine and clear, with S.E. winds in N., and N.W. in S.; sea moderate. Rain: Cooktown, 0·48.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, L., cloudy, temperature 56; Cape St. George, N., 42, fine, moderate sea, temperature 68°; Clarence River, N.E., fine, smooth sea, temperature 74°; Deniliquin, N.W., 42, fine and very warm, temperature 82°; Dubbo, N.W., 28, fine, temperature 81°; Eden, N.E., 14, cloudy and showery, smooth sea, temperature 63°; Walgett, N.N.E., 28, thunderstorm, temperature 92°; Goulburn, calm, dull, temperature 69°; Menindie, W., gale, clouds of sand, temperature 76°; Moruya, N.E., 14, fine, smooth sea, temperature 68°; Newcastle, N.E., 14, fine, smooth sea, temperature 71°; Port Macquarie, N.E., 28, hazy, smooth sea, temperature 77°; Sydney, E.N.E., 10, cloudy, smooth sea, temperature 68°; Wentworth, W., cloudy, temperature 82°.

Victoria.—Melbourne, N.W.E., 13, fine, temperature 77°; Cape Otway, E., 13, fine but misty, rough sea, temperature 64°; Portland, W., 28, fine, sea smooth, temperature 64°; Wilson's Promontory, N.E., 23, cloudy and gloomy, smooth sea temperature 57°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 5 inches above summer level; at Hay, 4 feet 4 inches above summer level. Murray: At Albury, 5 feet 6 inches above summer level; at Euston, 13 feet 10 inches above summer level. Darling: At Wentworth, 10 feet 8 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 22.

Sun rises at 5.12, sets at 6.17; Moon 4·55 p.m., 3.58 a.m.; Mercury, 5.24 a.m., 6.37 p.m.; Venus, 7.21 a.m., 9.46 p.m.; Mars, 2.12 a.m., 12.49 p.m.; Jupiter, 3.45 a.m., 3.34 p.m.; Saturn, 11.33 p.m., 9.29 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 22: 6.51 a.m., 7.13 p.m.

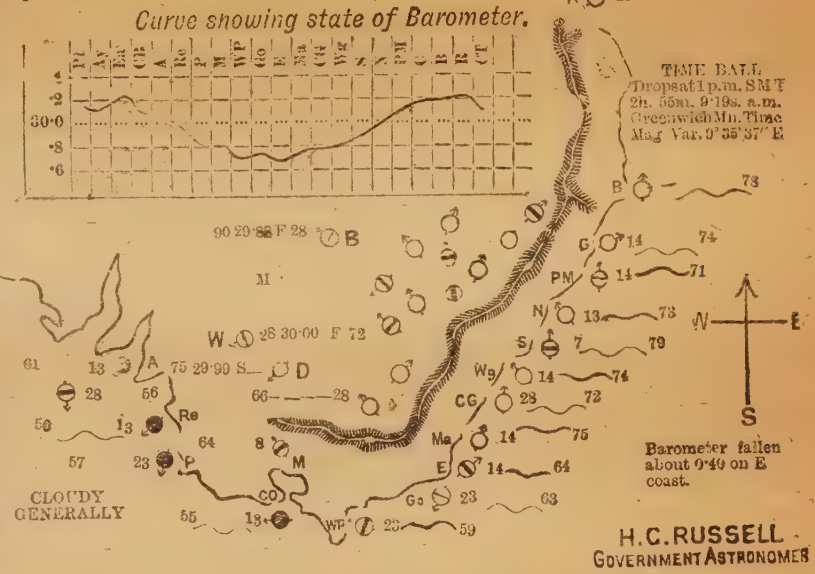
METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 22, 1885.

Stations		wt.	M'x	M'n	r'n
Albury		b	75	58	0·08
Armidale		b	78	51	0·09
Balrana'd		g	99	68	0
Bathurst		c	81	59	0·19
Bend'm'r		b	85	59	0·31
Bodal'a		g	73	54	0
Bourke		c	108	74	0
C'md'n H.		u	76	65	0·54
C.St.Geo.		b	73	63	0
Carcoar		g	74	63	0·18
Casino		c	91	53	0
Cassilis		c	85	61	0·08
Clarence		c	85	63	0
C'nd'b'lin		g	74	59	0
Cooma		c	79	51	0·02
Coonab'n		g	93	54	0
C'namble		g	—	—	0
Cowra		g	76	—	0
Deniliq'n		b	94	48	0
Dubbo		c	96	66	0
Eden		u	64	59	0·06
Euston		g	95	55	0
Forbes		b	88	72	0
Gl'n Inn's		b	90	53	0·03
Goulburn		b	79	56	0
Grafton		u	86	65	0·07
Gunned'h		c	93	63	0·01
Hay		c	94	57	0
Hill End		u	—	—	0·07
Inverell		b	84	66	0
Kiandra		c	65	47	0·23
Lismore		c	94	64	0
Maitland		c	78	63	0·11
Marsdens		c	87	48	0
Menindie		—	—	—	—
Moloney		c	86	64	0
Moree		c	93	71	0
Moruya		c	77	60	0
Mose Vale		b	70	56	0
M.Vict'ria		c	79	55	0·14
Mudgee		g	92	55	0·15
Murr'mb'h		c	79	58	0
Murr'ndi		b	83	64	0·40
Musl'br'k		b	83	54	0·15
Narrabri		g	99	63	0·01
Newcastle		c	74	64	0·04
Nowra		b	79	61	0
Orange		g	79	59	0
Paton		b	74	58	0·22
P. M'c'rie		g	78	63	0·26
Port'ph'ns		•	78	64	0·05
Quiberan		c	74	57	0·09
Quirindi		c	89	51	0
Singleton		b	80	62	0·14
Sydney		g	80	63	0·06
Tamw'rth		b	90	66	0
Taralga		b	79	57	0
Taree		c	84	65	0·26
Tent'field		c	92	53	0
Wagga		b	89	59	0·05
Walcha		c	83	56	0·16
Walgett		b	102	69	0
Wat'w'rth		c	94	57	0
Wilcannia		o	—	—	0
Wil'ng'ng		b	76	65	0
Young		g	83	59	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·450
Total Rainfall from January 1st to October 22.... 34·654
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm — Rain, wind S. — wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with S. to N.E. winds, and smooth sea. Cloudy in places. No rain.

South Australia reports weather generally dull inland to Beltana. Raining at many stations. Light rains recorded inland to Willsington, heaviest over Mount Lofty Ranges. Winds generally S.W., fresh. Rainfall—Cape Borda, 0·90. Streaky Bay, 0·10; C. Borda, 0·10; Adelaide, 0·21; Robe, 0·05; M'Donnell Bay, 0·01.

Victoria.—Generally cloudy, raining in S.W., fresh N.W. to S.W. winds, falling barometers, and smooth sea on coast. Light clouds, with N.N.W. wind inland at Omeo. Rainfall—Portland, 0·03; Wilson's, 0·12. Wilson's reports thunderstorm night of 21st.

Tasmania.—Light rain on N. coast, with light S.E. wind. Rainfall—0·39.

New Zealand.—Russell, barometer 30·20, wind calm; Wellington, barometer 29·90, wind N.W., light; Bluff, barometer 29·90, wind S.W. Fine generally.

New South Wales.—9 a.m.: Generally cloudy inland, with light N.E. to N.W. winds, and calm and warm weather. Fine on coast, with warm N. winds, falling barometers, and smooth sea. Details in map above. During the forenoon at Sydney, the wind was hot from N.N.W., the max. in shade being 90°. At 2·18 p.m. a very heavy squall of wind and rain from the W. came up, and continued until 2.45 p.m., then lulled and cleared, and during the latter part of the afternoon was followed by a strong gusty westerly wind. See 3 p.m. observations at Dubbo and Goulburn below.

Queensland.—Generally fine and clear, with light northerly winds and calm and moderate sea; fresh S.E. wind at Cooktown; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 8, cloudy, raining; temperature 59°; Cape Otway, S.W., 13, cloudy and raining, moderate sea, temperature 55°; Portland, S.S.W., 28, moderate sea, temperature 59°; Wilson's Promontory, W., 23, fine, squally, moderate sea, temperature 62°.

New South Wales.—Albury, W., cloudy, temperature 70°; Cape St. George, N., 28, cloudy, smooth sea, temperature 78°; Clarence River, N.E., strong and hazy, smooth sea, temperature 74°; Dubbo, N.W., 42, fearful dust storm all day, temperature 82°; Eden, E., 28, like rain, slight sea, temperature 67°; Goulburn, N.W. gale, fine temperature 77°; Menindie, S.W., 28°, fine and hot, temperature 78°; Moruya, W.N.W., 42, gloomy, moderate sea, temperature 89°; Newcastle, N.E., fine, smooth sea, temperature 79°; Port Macquarie, N.N.E., 42, fine, moderate sea, temperature 77°; Sydney, W., 8, cloudy, warm winds all day, smooth sea, temperature 78°; Wentworth, W., 28, fine, temperature 66°; Walgett, S.W., strong, hot, temperature 95°. Moruya, 4.13 p.m., blowing southerly gale, overcast, sea rising, violent squall from W.N.W., with rain at 2.30 p.m.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 7 inches above summer level; at Hay, 5 feet above summer level; at Balranald, 8 feet above summer level. Murray: At Albury, 5 feet 10 inches above summer level; at Euston, 14 feet 2 inches above summer level. Darling: At Wentworth, 10 feet 11 inches above summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 23.

Sun rises at 5.11, sets at 6.18; Moon 5·55 p.m., 4.8? a.m.; Mercury, 5.24 a.m., 6.40 p.m.; Venus, 7.22 a.m., 9.47 p.m.; Mars, 2.10 a.m., 12.48 p.m.; Jupiter, 3.42 a.m., 3.31 p.m.; Saturn, 11.29 p.m., 9.25 a.m. New moon, 8th; full moon 24th.

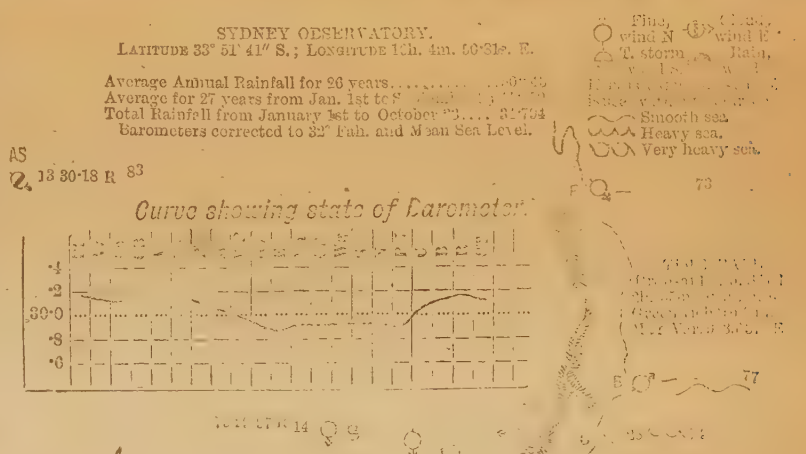
High water at Fort Denison, October 23: 7.35 a.m., 7.56 p.m.

METEOROLOGICAL REPORTS AND MAP [illegible]

Stations	W.T.	M'x	m'm	r'in
Albury	b	77	58	0·01
Armidale	b	85	62	0·10
Balranald	c	78	45	0
Bathurst	c	81	46	0
Bend'm'r	t	82	59	0·01
Bodalla ..	g	92	58	0
Bourke ..	b	100	61	0
C'md'n H.	c	82	65	0
C. St. Geo.	c	91	54	0
Carcoar ..	b	74	51	0
Casino ..	b	95	65	0·09
Cassilis ..	b	87	63	0
Clarence	c	84	63	0·12
C'nd'b'lin	b	67	46	0
Cooma ...	u	89	44	0
Coonab'n	b	95	56	0
C'namble	b	—	—	—
Cowra ..	b	73	64	0
Deniliq'n	b	75	48	0
Dubbo ..	b	94	49	0
Eden	c	79	58	0
Euston ..	c	76	51	0
Forbes ..	b	83	55	0
Gl'n Inn's	–	—	—	—
Goulburn	b	87	49	0
Grafton ..	c	94	65	1·01
Gunned'h	–	—	—	—
Hay	c	84	52	0
Hill End	b	—	—	0
Inverell ..	–	—	—	—
Kiandra	g	68	43	0·02
Lismore	–	—	—	—
Maitland	b	96	65	0
Marsdens	–	—	—	—
Menindie	c	80	60	0
Molong ..	b	86	51	0
Moree ..	–	—	—	—
Moruya ..	u	93	59	0
Moss Vale	b	81	52	0
M. Vict'ria	c	79	49	0
Mudgee ..	b	89	47	0
M'rr'mb'h	b	80	53	0
M'rr'r'ndi	–	—	—	—
Mus'lbr'k	g	97	60	0
Narrabri	–	—	—	—
Newcastle	b	91	64	0
Nowra ..	c	97	53	0
Orange ..	g	75	44	0
Picton ..	c	90	56	0
P. M'q'rie	u	78	67	0
P. St'ph'ns	c	78	62	0·04
Q'nbeyan	c	79	55	0
Quirindi	c	91	55	0
Singleton	b	93	66	0
SYDNEY ..	c	90	61	0·14
Tamw'rth	c	98	65	0·10
Taralga ..	b	83	45	0
Taree	r	92	66	0·06
T'nt'rfield	b	89	56	0·55
Wagga ..	–	—	—	—
Walcha ..	c	80	58	0
Walgett ..	b	102	67	0
W'ntw'rth	c	94	52	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	93	57	0
Young ..	c	94	47	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 1h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... [illegible]
Average for 27 years from Jan. 1st to [illegible]
Total Rainfall from January 1st to October [illegible] .... 31·[illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with fresh S. winds, sea smooth. No rain.

South Australia generally fine, with scattered clouds inland, and dull on and near coast; winds light, from S. to S.E. and E.; smooth sea, rising barometers, and light E. winds and calm on coast. Rainfall—Port Darwin, 0·03; C. Borda, 0·02; Robe, 0·02.

Victoria generally cloudy; fresh N.E. to S.E. winds, rather rough sea, and rising barometers on coast; fresh S.W. winds inland at Echuca, weather dull. Rainfall—Lake Entrance, 0·15; Melbourne, 0·21; Portland, 0·08; C. Otway, 0·01.

Tasmania.—Fine and clear; fresh S.S.E wind. Rainfall—Low [illegible] 0·07.

New Zealand.—Russell, barometer 30·30, wind calm; Wellington, barometer 30·00, wind N.W.; Bluff, barometer 29·90, wind W., light

New South Wales.—9 a.m.: Generally cloudy and unsettled, [illegible] inland, in S.W. and west. See map above. Raining at Taree, and thunderstorm passing over Bendemeer. Smooth sea [illegible] fresh southerly winds on coast. Barometer falling in N. and [illegible] down S. Several of the stations in the New England [illegible] report thunderstorms either during the evening or afternoon of the 22nd.

Queensland.—Generally fine and clear on E. coast; light S.E. winds in N. and N.E. and N.W. in S. Sea smooth. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers steady. Melbourne, S.S.W., 18, fine, temperature 61°; Cape Otway, W.S.W., 6, rusty, moderate sea, temperature 59°; Wilson's Promontory, N.E., 12, cloudy, smooth sea, temperature 61°.

New South Wales.—Albury, N.W., cloudy, temperature 67°; Cape St. George, S.S.E., 42, cloudy, smooth sea, temperature 64°; Clarence River, N.E., hazy, rough sea, temperature 71°; Eden, S.W., 42, dull, slight sea, temperature 69°; Goulburn, calm, dull, temperature 70°; Moruya, S., 42, gloomy, moderate sea, temperature 61°; Port Macquarie, S., 28, thunderstorm, smooth sea, temperature 71°; Sydney, S.E., 8, dull, smooth sea, temperature 67°; Wentworth, W., fine, temperature 68°; Walgett, S.W., fine, temperature 84°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 10 inches above summer level; at Hay, 4 feet 6 inches above summer level; at Balranald, 7 feet above summer level. Murray: At Albury, 5 feet 6 inches above summer level; at Euston, 14 feet 6 inches above summer level. Darling: At Wentworth, 11 feet 1 inche above summer level. At Poonearie, Menindie, and Wilcannia, low.

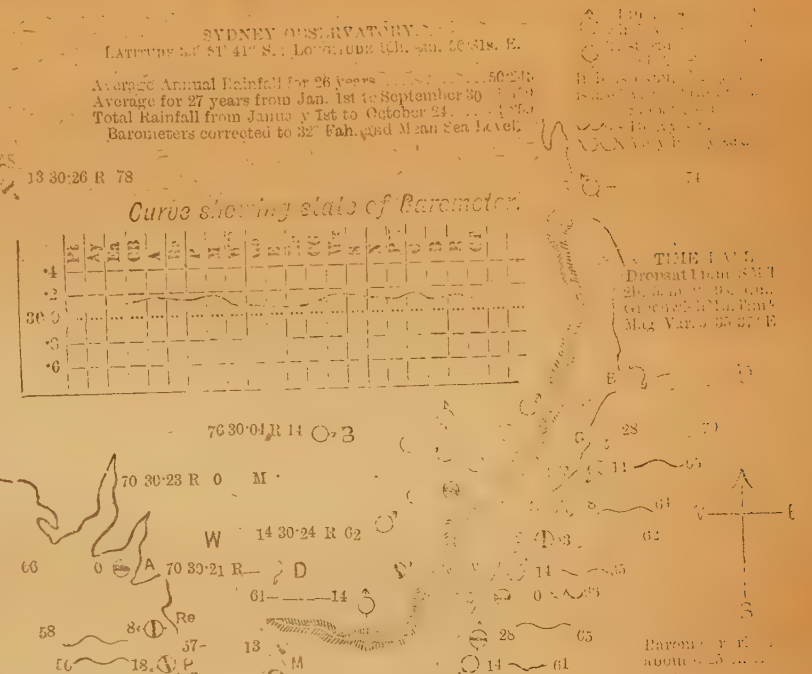
ASTRONOMICAL MEMORANDA FOR OCTOBER 24.

Sun rises at 5.10, sets at 6.19; Moon 6·56 p.m., 5.31 a.m.; Mercury, 5.25 a.m., 6.43 p.m.; Venus, 7.23 a.m., 9.49 p.m.; Mars, 2.8 a.m., 12.46 p.m.; Jupiter, 3.38 a.m., 3.23 p.m.; Saturn, 11.25 p.m., 9.21 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 24: 8.17 a.m., 8.37 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 24, 1885

Stations	wt	Mx	mn	R'in
Albury	b	76	50	0
Armidale	b	75	54	0·10
Bairanald	b	87	41	0
Bathurst	c	73	52	0
Bend'm'r	b	75	46	0
Bodalla ..	c	67	54	0·16
Bourke ..	b	86	57	0
C'md'n H.	a	72	62	0·24
C. St. Geo.	c	78	58	0
Carcoar ..	b	68	54	0
Casino ..	g	95	51	0
Cassilis ..	g	78	61	0
Clarence	c	81	61	0
C'nd'b'lin	b	66	45	0
Cooma ..	c	69	38	0
Coonab'n	b	83	44	0
C'namble	b	—	—	0
Cowra ..	b	74	67	0
Deniliq'n	b	81	44	0
Dubbo ..	b	83	51	0
Eden	b	69	49	0·01
Euston ..	b	83	47	0
Forbes ..	b	70	49	0
Gl'n Inn's	b	78	43	0·05
Goulburn	b	76	49	0·21
Grafton ..	c	90	61	0·11
Gunned'h	b	87	63	0
Hay	b	79	49	0
Hill End	b	—	—	0
Inverell..	b	81	48	0
Kiandra	c	55	41	0·17
Lismore	c	93	66	0
Maitland	b	86	60	0
Marsdens	b	77	58	0
Menindie	b	86	60	0
Molong ..	b	79	48	0
Moree ..	b	92	58	0
Moruya ..	c	67	55	0·09
Moss Vale	u	68	51	0·06
M. Vict'ria	g	71	48	0
Mudgee ..	c	85	51	0
M'rr'mb'h	b	72	52	0
M'rr'r'ndi	b	79	58	0·04
Mus'lbr'k	c	89	56	0
Narrabri	b	96	58	0
Newcastle	c	76	59	0·03
Nowra ..	—	—	—	—
Orange ..	c	69	44	0
Picton ..	o	76	57	0
P. M'q'rie	c	76	56	0·73
P.St'ph'ns	c	75	57	0·04
Q'nbeyan	c	70	60	0
Quirindi	b	86	50	0
Singleton	b	79	63	0·50
SYDNEY ..	g	76	59	0·07
Tamw'rth	b	85	57	0
Taralga ..	b	73	50	0·12
Taree	g	78	61	0·41
T'nt'rfield	b	82	48	0
Wagga ..	—	—	—	
Walcha ..	o	73	48	0
Walgett	b	88	57	0
W'ntw'rth	b	81	53	0
Wileannia	b	—	—	0
W'll'ng'ng	c	76	48	0
Young ..	b	81	51	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; rn, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coastal station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the state the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown—P, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Pt, Robe; P, Portland, M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Mo, Moruya; C, Crowdy Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Cooma Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine inland, scattered clouds on and near coast inland, dull north of Peake; smooth sea, rising barometer, and light W. winds and calms on coast; winds generally light and variable and calm. Rainfall: Port Darwin, 0·01.

Victoria.—Cloudy on coast, with fresh S.W. winds, steady barometer, and smooth sea; fine and calm inland at Omeo; and fine but cloudy, with fresh S.W. wind, at Echuca. Rainfall: Wilson's Promontory, 0·01.

Tasmania.—Fine and clear on north coast, with fresh W. wind. No rain.

New Zealand.—Russell: Barometer, 30·20; wind calm, fine. Wellington: Barometer, 29·90; wind N.W., showery. Bluff: Barometer, 29·70; wind N.E., foggy.

New South Wales.—Generally fine and clearing, still cloudy in places (see map); moderate sea, rising barometers, and light N.E. to S.E. winds on coast, calm inland. Rain: Port Macquarie, 7·73; and Taree, 0·41; but at other stations much lighter.

Queensland.—Fine and clear on N. coast, with light S.E. winds and moderate sea. Rainfall: Brisbane, 0·01; and Cape Moreton, 0·20.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, N., 12, showery, rough sea, temperature 61°; Portland, W.S.W., 30, clear, smooth sea, temperature 60°; Wilson's Promontory, W., 24, squally, smooth sea, temperature 58°.

New South Wales.—Albury, N.W., fine, temperature 70°; Cape St. George, N.E., 12, fine, sea going down, temperature 67°; Deniliquin, S., fine, temperature 70°; Eden, E., 14, fine, smooth sea, temperature 63°; Goulburn, W., fine, temperature 67°; Moruya, N.E., 12, fine, moderate sea, temperature 66°; Newcastle, N.E., 10, fine, smooth sea, temperature 66°; Port Macquarie, S.E., 14, fine, smooth sea, temperature 73°; Sydney, N.E., 14, fine, smooth sea, temperature 64°; Walgett, S.W., fine, hot, temperature 88°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 10 inches above summer level; at Hay, 4 feet 6 inches above summer level; at Balranald, 7 feet above summer level. Murray: At Albury, 6 feet 4 inches above summer level; at Euston, 11 feet 8 inches above summer level. Darling: At Wentworth, 11 feet 2 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

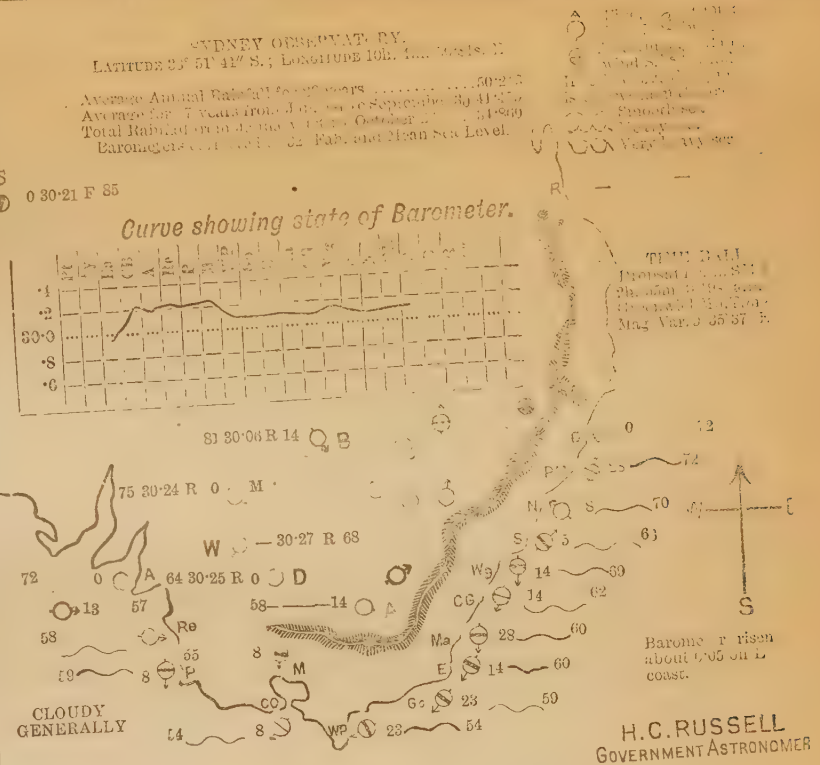
ASTRONOMICAL MEMORANDA FOR OCTOBER 25.

Sun rises at 5.8, sets at 6.21; Moon, 9.2 p.m., 6.37 a.m.; Mercury, 5.25 a.m., 6.49 p.m.; Venus, 7.24 a.m., 9.2 p.m.; Mars, 2.4 a.m., 12.44 p.m.; Jupiter, 3.31 a.m., 3.22 p.m.; Saturn, 11.17 p.m., 9.13 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 25, 9.38 a.m., 10 p.m.

ECOLOGICAL REPORTS AND MAP FOR OCTOBER 26, 1887.

[illegible]	b	81	45	0
Dale	b	83	51	0
nald	b	92	42	0
arst	c	81	42	0
i'm'r	u	79	54	0
lla ..	g	73	53	0
rke ..	b	95	65	0
d'n H.	c	75	61	0
t. Geo.	c	71	56	0
coar ..	b	89	46	0
ino ..	c	78	65	0
illis ..	b	78	64	0
rence	c	85	[illegible]	0
d'b'lin	b	69	46	0
ma ..	c	83	18	0
mab'n	b	89	52	0
amble	u	—	—	0
wra ..	b	74	65	0
nilig'n	b	83	40	0
bbo ..	b	90	54	0
en	c	65	52	0
ston ..	c	89	47	0
rbes ..	b	80	53	0
'n Inn's	t	87	50	0·12
oulburn	c	77	44	0
rafton ..	u	87	55	0·39
unned'h	c	91	68	0
lay	b	83	50	0
Hill End	b	—	—	0
nverell ..	u	81	48	0
Kiandra	b	65	27	0
Lismore	u	76	69	0
Maitland	g	83	55	0
Marsdens	b	85	61	0
Menindie	b	86	65	0
Molong ..	—	—	—	—
Moree ..	g	94	68	0
Moruya ..	g	72	54	0
Moss Vale	c	63	53	0
M. Vict'ria	b	73	47	0
Mudgee ..	c	89	46	0
M'rr'mb'h	b	83	47	0
M'rr'r'ndi	c	73	56	0
Mus'lbr'k	c	85	50	0
Narrabri	g	96	60	0
Newcastle	b	72	68	0
Nowra ..	c	77	49	0
Orange ..	c	71	47	0
Picton ..	c	71	55	0
P. M'q'rie	c	76	66	0·33
P.St'ph'ns	b	78	57	0
Q'nbeyan	b	74	51	0
Quirindi	c	88	55	0
Singleton	b	75	58	0
SYDNEY ..	g	69	61	0
Tamw'rth	c	85	66	0
Taralga ..	b	86	47	0
Taree	—	—	—	—
T'nt'rfield	p	85	58	0·06
Wagga ..	b	87	43	0
Walcha ..	g	76	47	0
Walgett ..	b	91	62	0
W'ntw'rth	b	86	56	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	71	60	0·10
Young	b	90	47	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney, N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine and warm, scattered clouds between Charlotte and Powell's Creek; winds generally light and from S.E. to N.E. Smooth sea, E. winds, and rising barometers on coast. No rain.

Victoria.—Generally cloudy; smooth sea, rising barometers, and light S. and S.W. winds on coast; calm and cloudy inland at Omeo. No rain.

Tasmania.—Fine and clear on north coast, with fresh W. wind.

New Zealand.—Russell: Barometer, 30·10; wind calm, showery. Wellington: Barometer, 30·20; wind N.W., fine. Rain: 0·14 in Nelson. Bluff: Barometer, 29·70; wind W., fine.

New South Wales.—Generally fine inland, and cloudy on the mountains and coast country; winds light and variable and calm; smooth sea, rising barometers, and light S.W. winds on coast. Details in map above.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 13, fine, temperature 60°; Cape Otway, S.W., 28, dull, moderate sea, temperature 59°; Portland, S.E., 18, fine, smooth sea, temperature 60°; Wilson's Promontory, W.S.W., 23, squally, moderate sea, temperature 56°.

New South Wales.—Albury, N.W. fresh, fine, temperature 77°; Cape St. George, S., 28, cloudy, smooth sea, temperature 66°; Deniliquin, calm, fine, clear, temperature 73°; Dubbo, N., 8, fine, temperature 76°; Eden, E., fine, slight sea, temperature 63°; Goulburn, E., fine, temperature 68°; Menindie, S.W., 14, fine, clear, temperature 82°; Moruya, S.E., 28, dull, smooth sea, temperature 66°; Newcastle, N.E., fine, smooth sea, temperature 69°; Port Macquarie, N.N.E., 28, showery, smooth sea, temperature 76°; Sydney, S.S.E., 8, dull, smooth sea, temperature 63°; Wentworth, calm, fine, temperature 76°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 6 inches above summer level; at Hay, 3 feet 11 inches above summer level; at Balranald, 6 feet 5 inches above summer level. Murray: At Albury, 4 feet 10 inches above summer level; at Euston, 15 feet above summer level. Darling: At Pooncarie, Menindie, Wilcannia, and Bourke, low.

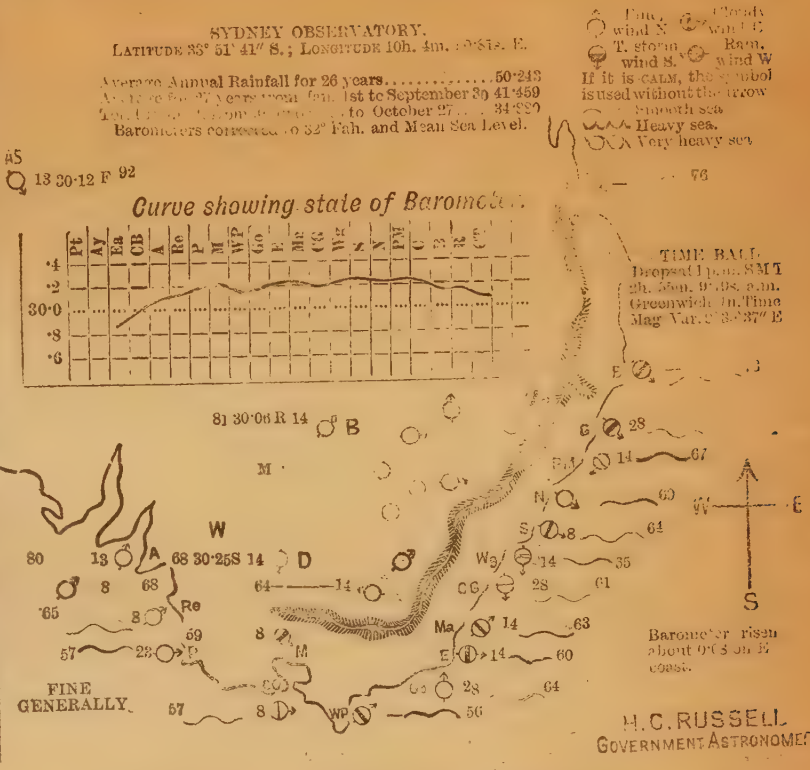
ASTRONOMICAL MEMORANDA FOR OCTOBER 27.

Sun rises at 5.7, sets at 6.22; Moon, 10·2 p.m., 7·26 a.m.; Mercury, 5.25 a.m., 6.52 p.m.; Venus, 7.25 a.m., 9.53 p.m.; Mars, 2.2 a.m., 12.43 p.m.; Jupiter, 3.28 a.m., 3.19 p.m.; Saturn, 11.13 p.m., 9.9 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 27: 10.21 a.m., 10.43 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 27, 1885.

Stations	w.	Mx	Mn	R'in
Albury	b	84	51	0
Armidale	b	73	50	0·21
Balranald	b	96	44	0
Bathurst	b	83	51	0·01
Bend'm'r	b	75	44	0
Bodalla ..	c	79	49	0
Bourke ..	b	97	61	0
C'md'n F.	c	75	[illegible]	0
C. St. Geo.	u	74	55	0
Carcoar ..	–	—	—	—
Casino ..	u	78	60	1·09
Cassilis ..	b	80	65	0
Clarence	u	84	60	0·51
C'nd'b'lin	b	72	47	0
Cooma ..	b	85	49	0
Coonab'n	b	[illegible]	49	0
C'namble	b	—	—	0
Cowra ..	b	76	70	0
Deniliq'n	b	88	42	0
Dubbo ..	b	90	61	0
Eden	c	71	55	0
Euston ..	b	90	45	0
Forbes ..	b	87	50	0
Gl'n Inn's	g	68	59	0·00
Goulburn	g	82	52	0
Grafton ..	u	82	63	0·34
Gunned'h	b	89	61	0
Hay	–	—	—	—
Hill End	b	—	—	0
Inverell ..	b	80	54	0
Kiandra	b	69	41	0
Lismore	u	76	64	0·36
Maitland	c	81	62	0
Marsdens	b	85	61	0
Menindie	–	—	—	—
Molong ..	b	83	55	0
Moree ..	b	93	62	0
Moruya ..	g	69	54	0·01
Moss Vale	d	62	38	0
M. Vict'ria	g	76	50	0·07
Mudgee ..	c	89	54	0
M'rr'mb'h	b	83	55	0
M'rr'r'ndi	b	[illegible]	58	0
Mus'lb r'k	b	90	62	0
Narrabri	b	94	59	0
Newcastle	b	77	63	0
Nowra ..	c	70	59	0
Orange ..	b	74	52	0
Picton ..	g	76	59	0·14
P. M'q'rie	c	78	58	0·02
P.St'ph'ns	b	77	60	0
Q'nbeyan	c	75	37	0
Quirindi	b	81	48	0·13
Singleton	b	75	66	0
SYDNEY ..	g	74	63	0·02
Tamw'th	b	85	50	0·12
Taralga ..	d	83	52	0
Taree	c	81	61	0·01
T'nt'rfield	u	77	51	0·42
Wagga ..	b	78	55	0
Walcha ..	c	73	46	0·18
Walgett ..	b	91	65	0
W'ntw'th	–	—	—	—
Wilcannia	b	—	—	0
W'll'ng'ng	g	74	60	0
Young ..	b	92	52	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c. detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each one wind is the wind symbol is placed like a vane pointing to the direction from which it is coming. A clear circle with it means fine weather; with bar, cloudy weather; and a black spot, raining. Next to this are placed figures denoting the number of miles the wind is moving; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of the barometers round the coast from Perth to Cooktown:—P, Perth; Ay, Ayr; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine and warm. Scattered clouds west of Cape Borda, and between Beltana and Alice Springs; wind fresh from N. to N.E. Smooth sea, and falling barometers on coast. No rain.

Victoria.—Generally fine; cloudy in S.E.; smooth sea, falling barometers, and light E. winds on coast. Fine inland at Echuca and Omeo, with light S. and N. winds. No rain.

Tasmania.—Fine, but cloudy on north coast, with light N.N.E. wind.

New Zealand.—Russell: Barometer, 30·10; wind S.W. light, generally fine and clear. Wellington: Barometer, 30·80; wind S.W., light, generally fine and clear. Bluff: Barometer, 29·80; wind W., 28, generally fine and clear.

New South Wales.—Generally fine and clear, with light variable winds, smooth sea, rising barometers, light to fresh southerly winds and cloudy weather on coast. Details in map above. Heaviest rainfall, 1·09 at Casino.

Queensland.—Generally fine on E. coast. Dull at Brisbane. Winds, S.E. Sea moderate. Rainfall, Brisbane, 0·34; C. Moreton, 0.15.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 15, fine, temperature 63°; Cape Otway, E., 8, fine, moderate sea, temperature 60°; Portland, E., 28, fine, smooth sea, temperature 60°; Wilson's Promontory, N.E., 8, cloudy, smooth sea, temperature 62°.

New South Wales.—Albury, N.W. fine, temperature 76; Cape St. George, E.N.E., 28, fine, moderate sea, temperature 66°; Deniliquin, S., fine, temperature 66°; Goulburn, N.E., 14, fine, temperature 63°; Menindie, E., fine, clear, temperature 78°; Moruya, N.E., 23, fresh gale, moderate sea, temperature 66°; Newcastle, E., 8, fine, smooth sea, temperature 68°; Port Macquarie, N.E., 14, fine, smooth sea, temperature 76°; Sydney, S.E., 8, dull, smooth sea, temperature 66°; Wentworth, N.W., fine, hot, temperature 77°; Walgett, S.E., fine, temperature 89°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Balranald, 6 feet 5 inches above summer level. Murray: At Albury, 4 feet 5 inches above summer level; at Euston, 15 feet 1 inch above summer level. Darling: At Wilcannia and Bourke, low.

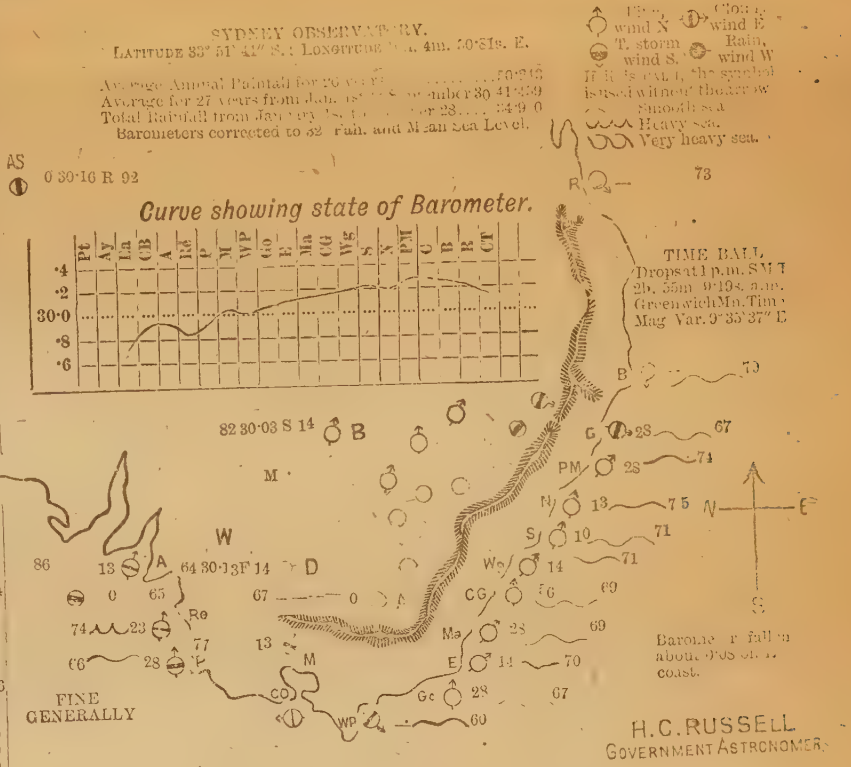
ASTRONOMICAL MEMORANDA FOR OCTOBER 28.

Sun rises at 5.6, sets at 6.23; Moon. 11·0 p.m., 8·20 a.m.; Mercury, 5.26 a.m., 6.54 p.m.; Venus, 7.25 a.m., 9.55 p.m.; Mars, 1.59 a.m., 12.41 p.m.; Jupiter, 3.24 a.m., 3.16 p.m.; Saturn, 11.9 p.m., 9.5 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 28: 11.4 a.m., 11.28 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 28, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	87	53	0
Armidale	c	67	52	0
Balranald	b	101	46	0
Bathurst	b	84	40	0
Bend'm'r	b	76	46	0
Bodalla ..	b	76	51	0
Bourke ..	b	103	67	0
C'md'n H.	b	74	62	0
C. St. Geo.	b	71	40	0
Carcoar ..	b	75	—	0
Casino ..	c	82	61	0·26
Cassilis .	b	78	59	0
Clarence	r	80	60	0·50
C'nd'b'lin	b	77	56	0
Cooma ..	f	87	45	0
Coonab'n	c	88	50	0
C'namble	b	—	—	0
Cowra ..	b	78	—	0
Deniliq'n	b	95	47	0
Dubbo ..	b	94	61	0
Eden	b	71	62	0
Euston ..	c	100	55	0
Forbes ..	b	93	58	0
Gl'n Inn's	d	76	57	0·01
Goulburn	b	81	47	0
Grafton ..	r	73	63	0·75
Gunned'h	b	86	64	0
Hay	b	91	51	0
Hill End	b	—	—	0
Inverell ..	b	77	55	0
Kiandra	b	71	31	0
Lismore	p	78	66	0·54
Maitland	b	83	58	0
Marsdens	b	90	67	0
Menindie	—	—	—	—
Molong ..	b	84	55	0
Moree ..	b	95	63	0
Moruya ..	b	72	54	0·66
Moss Vale	b	60	53	0
M. Vict'ria	b	74	49	0
Mudgee ..	b	87	53	0
M'rr'mb'h	b	86	55	0
M'rr'r'ndi	b	75	55	0
Mus'lbr'k	b	90	51	0
Narrabri	b	—	60	0
Newcastle	b	78	62	0
Nowra ..	b	76	50	0
Orange ..	b	77	51	0
Picton ..	c	73	61	0
P. M'q'rie	b	78	61	0
P.St'ph'ns	c	75	60	0
Q'nbeyan	b	76	56	0
Quirindi	b	85	51	0
Singleton	b	80	61	0
SYDNEY ..	b	72	59	0·02
Tamw'rth	b	81	55	0
Taralga ..	b	81	49	0
Taree	c	81	57	0·01
T'nt'rfield	u	72	56	0
Wagga ..	b	92	52	0
Walcha ..	g	65	50	0
Walgett .	b	94	67	0
W'ntw'rth	—	—	—	—
Wilcannia	b	—	—	0
W'll'ng'ng	b	75	59	0
Young ..	b	92	54	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather dull, sultry, and hot inland to Alice Springs, but scattered clouds north of Burra; thunderstorm in night at Yam Creek, where 1·70 of rain fell; prevailing winds N.E. to N., fresh. Barometers steady. Stormy at Eucla, thunderstorm 7 p.m., 27. Rainfall: Streaky Bay, 0·03.

Victoria.—Generally fine, but cloudy on coast, with light variable winds and falling barometer. Fine and clear inland, with N. winds. Dense fog obscuring sea at Wilson's Promontory at 9 a.m.

Tasmania.—Light W.N.W. wind and scattered clouds on N. coast.

New Zealand.—Russell: Barometer, 30·20; wind N.W., fine generally. Wellington: Barometer, 30·00; wind N.W., fine generally. Bluff: Barometer, 30·00; wind S.W., fine generally.

New South Wales.—Generally fine and clear, light to fresh N.E. wind, smooth sea and falling barometers on coast; calm and warm inland. Details in map above.

Queensland.—Generally cloudy on E. coast, with light S. and S.E. winds and moderate sea. Rainfall, Cooktown, 0·34.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., cloudy, temperature 78°; Cape St. George, N.E., 28, fine, smooth sea, temperature 69°; Clarence River, S.E., raining, moderate sea, temperature 69°; Deniliquin, N.E., fine, temperature 88°; Dubbo, N.N.E., fine, temperature 91°; Eden, N.E., 42, fine, smooth sea, temperature 73°; Goulburn, N.W., fine, temperature 73°; Menindie, N., fine, temperature 84°; Moruya, N.E., 56, fresh gale, fine, moderate sea, temperature 68°; Newcastle, N.E., fine, smooth sea, temperature 69°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 79°; Sydney, N.E., 8, fine, smooth sea, temperature 70°; Wentworth, N., fine, temperature 85°.

Victoria.—Barometers falling. Melbourne, N., 12, cloudy, temperature 83°; Cape Otway, N., 12, misty, moderate sea, temperature 79°; Portland, W.N.W., 30, fine, smooth sea, temperature 87°; Wilson's Promontory, N.E., 24, misty, and so thick observer cannot see the sea, temperature 63°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 2 inches above summer level; at Hay, 3 feet 4 inches above summer level; at Balranald, 6 feet 3 inches above summer level. Murray: At Albury, 4 feet above summer level; at Euston, 15 feet 1 inch above summer level. Darling: At Wilcannia and Bourke, low.

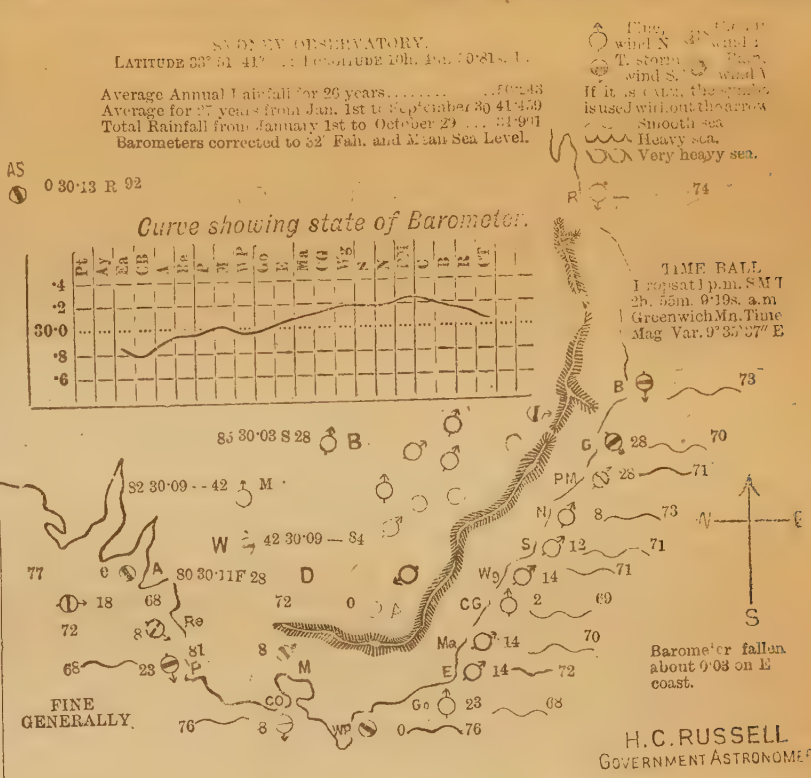
ASTRONOMICAL MEMORANDA FOR OCTOBER 29.

Sun rises at 5.4, sets at 6.24; Moon, 11·55 p.m., 9·18 a.m.; Mercury, 5.26 a.m., 6.58 p.m.; Venus, 7.25 a.m., 9.56 p.m.; Mars, 1.57 a.m., 12.39 p.m.; Jupiter, 3.21 a.m., 3.13 p.m.; Saturn, 11.5 p.m., 9.1 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 29: 11.51 a.m., — p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 29, 1889.

Stations	wt	Mx	Mn	R'in
Albury	b	94	58	0
Armidale	b	74	50	0
Balranald	b	96	59	0
Bathurst	b	85	52	0
Bend'm'r	b	78	47	0
Bodalla ..	b	82	49	0
Bourke ..	b	102	68	0
C'nid'n H.	c	78	64	0
C. St. Geo.	b	90	61	0
Carcoar ..	b	73	54	0
Casino ..	p	75	56	0·30
Cassilis ..	b	81	60	0
Clarence	c	74	59	0·21
C'nd'b'lin	b	80	60	0
Cooma ..	c	91	46	0
Coonab'n	b	90	49	0
C'namble	b	—	—	0
Cowra ..	b	82	76	0
Deniliq'n	b	100	50	0
Dubbo ..	b	96	59	0
Eden	b	74	58	0
Euston ..	c	108	68	0
Forbes ..	b	92	60	0
Gl'n Inn's	g	80	59	0·02
Goulburn	b	89	49	0
Grafton ..	d	73	61	0·42
Gunned'h	b	90	66	0
Hay	b	101	61	0
Hill End	b	—	—	0
Inverell ..	b	79	53	0
Kiandra	b	75	38	0
Lismore	r	75	63	0·15
Maitland	b	85	58	0
Marsdens	b	94	71	0
Menindie	b	98	75	0
Molong ..	b	96	56	0
Moree ..	b	93	62	0
Moruya ..	c	73	55	0
Moss Vale	b	70	54	0
M. Vict'ria	b	80	55	0
Mudgee ..	b	93	53	0
M'rr'mb'h	b	89	57	0
M'rr'r'ndi	b	82	57	0
Aus'lb'r'k	b	91	49	0
Narrabri	b	99	62	0
Newcastle	b	75	61	0
Nowra ..	–	—	—	—
Orange ..	b	78	51	0
Picton ..	b	82	51	0
P. M'q'rie	c	79	58	0
P.St'ph'ns	b	78	59	0
Q'nbeyan	b	82	59	0
Quirindi	b	90	56	0
Singleton	b	85	59	0
SYDNEY ..	b	73	60	0
Tamw'rth	b	96	60	0
Taralga ..	b	85	54	0
Taree	c	80	57	0
T'nt'rfield	c	73	51	0
Wagga ..	b	96	59	0
Walcha ..	f	71	42	0
Walgett ..	b	95	69	0
W'ntw'rth	c	104	69	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	60	0
Young ..		94	56	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally dull and gloomy; hot throughout; prevailing winds S.E. to N.E., light to fresh. Thunderstorm in night between Southport and Barrow, and W. from Eucla. Rain:—Fowler's Bay, 0·61; Streaky Bay, 0·46; Tennant's Creek, 0·28.

Victoria.—Generally cloudy. Light variable winds, smooth sea, and rising barometers on coast. N. winds and calm inland. No rain.

Tasmania.—Fine but cloudy on N. coast, with light N.N.E. wind. Rainfall: Low Heads, 0·01.

New Zealand.—Russell, barometer, 30·30; wind, S.W. Wellington, barometer, 30·20; wind, S.W. Bluff, barometer, 30·10; wind, W. Fine generally.

New South Wales.—Fine clear weather generally, with light northerly wind, and calm, smooth sea, falling barometers and light N.W. winds on coast; calm inland. Details in map above.

Queensland.—Generally fine on E. coast, with S. winds and moderate sea. Cloudy at Brisbane and Cooktown. Rainfall, Brisbane, 0·12; Rockhampton, 0·02.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W.N.W., cloudy, temperature 82; Cape St. George, N.E., 28, fine, moderate sea, temperature 71°; Clarence River, S.E., fine, moderate sea, temperature 73°; Deniliquin, N., fine and hot, temperature 104°; Dubbo, W., fine, temperature 84.; Eden, E., fine, smooth sea, temperature 69°; Forbes, N.W., 28, fine,; Goulburn, N.E., 14, fine, temperature 73°; Menindie, N.W., fine and hot, temperature 90°; Moruya, S.E., 42, fine, smooth sea, temperature 69°; Newcastle, N.E., fine, smooth sea, temperature 69°; Port Macquarie, N.E., 28, fine, moderate sea, temperature 77°; Sydney, N.E., 18, fine, smooth sea, temperature 72°; Wentworth, N., 42, dull and hot, temperature 95°. Walgett, N.E., 14, fine, hot; Cooma, very hot, 92.

Victoria.—Melbourne, N., 18, cloudy, temperature 90°; Cape Otway, E., 13, dull, smooth sea, temperature 66°; Portland, E.S.E., 23, cloudy, smooth sea, temperature 62°; Wilson's Promontory, calm, cloudy, smooth sea, temperature 70°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Hay, 3 feet 3 inches above summer level; at Balranald, 6 feet 3 inches above summer level. Murray: At Albury, 4 feet 3 inches above summer level; at Euston, 15 feet 3 inches above summer level. Darling: At Wentworth, 11 feet 9 inches above summer level; at Wilcannia and Bourke, low.

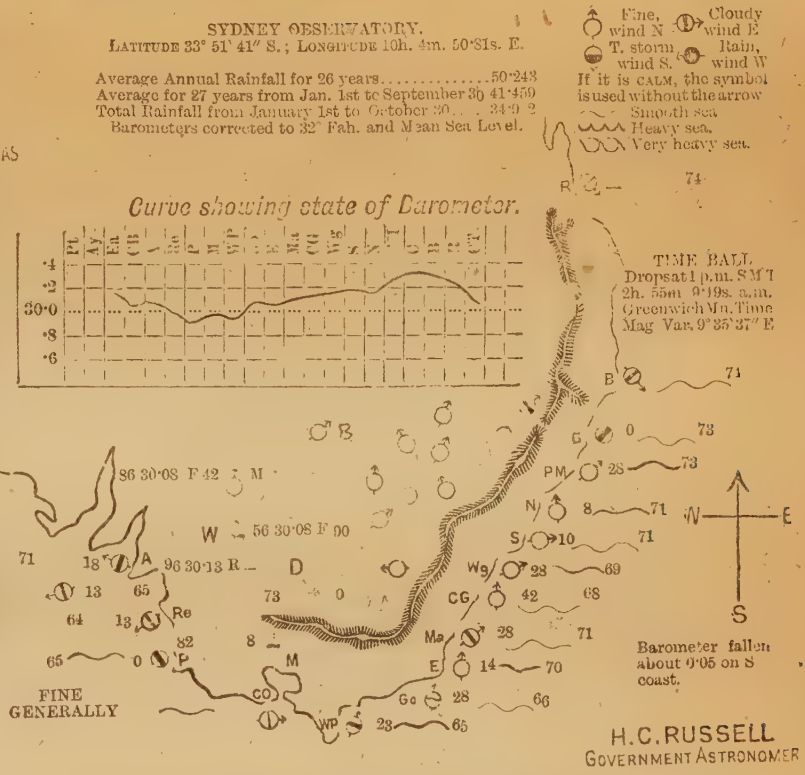
ASTRONOMICAL MEMORANDA FOR OCTOBER 30.

Sun rises at 5.3, sets at 6.25; Moon, —— p.m., 10.19 a.m.; Mercury, 5.27 a.m., 7.2 p.m.; Venus, 7.26 a.m., 9.58 p.m.; Mars, 1.55 a.m., 12.37 p.m.; Jupiter, 3.17 a.m., 3.10 p.m.; Saturn, 11.1 p.m., 8.57 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 30: 12.16 a.m., 12.41 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 30, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	97	61	0
Armidale	b	76	55	0
Balranald	b	111	71	0
Bathurst	b	92	49	0
Bend'm'r	b	80	49	0
Bodalla ..	–	—	—	—
Bourke ..	b	107	69	0
C'md'n H.	b	73	65	0
C. St. Geo.	b	86	61	0
Carcoar ..	b	81	57	0
Casino ..	u	79	63	0·14
Cassilis ..	b	84	53	0
Clarence	c	82	63	0·04
C'nd'b'lin	b	83	60	0
Cooma ..	c	94	59	0
Coonab'n	b	92	48	0
C'namble	b	—	—	0
Cowra ..	b	85	78	0
Deniliq'n	b	105	62	0
Dubbo ..	b	100	51	0
Eden	c	75	58	0
Euston ..	b	110	75	0
Forbes ..	b	100	62	0
Gl'n Inn's	b	85	53	0
Goulburn	b	94	50	0
Grafton ..	g	74	63	0·01
Gunned'h	b	92	67	0
Hay	–	—	—	—
Hill End	b	—	—	0
Inverell..	b	75	53	0
Kiandra	b	78	40	0
Lismore	p	78	67	0·23
Maitland	b	86	56	0
Marsdens	b	96	71	0
Menindie	c	97	81	0
Molong ..	–	—	—	—
Moree ..	b	94	64	0
Moruya ..	c	84	56	0
Moss Vale	c	80	56	0
M. Vict'ria	b	86	55	0
Mudgee ..	b	96	49	0
M'rr'mb'h	b	92	58	0
M'rr'r'ndi	b	84	60	0
Mus'lbr'k	b	93	53	0
Narrabri	b	98	63	0
Newcastle	b	76	60	0
Nowra ..	b	87	53	0
Orange ..	b	81	51	0
Picton ..	b	87	50	0
P. M'q'rie	b	80	60	0
P.St'ph'ns	b	79	59	0
Q'nbeyan	c	87	62	0
Quirindi	b	93	59	0
Singleton	b	82	62	0
SYDNEY ..	b	75	61	0
Tamw'rth	b	89	60	0
Taralga ..	b	92	49	0
Taree	b	82	58	0
T'nt'rfield	u	72	46	0
Wagga ..	b	99	61	0
Walcha ..	b	74	48	0
Walgett ..	b	97	70	0
W'ntw'rth	c	107	74	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	61	0
Young ..	b	98	57	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g. gloomy; h. hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t. thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n. the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar. cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay. Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M. Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth. Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—No reports for 30th. Rain—Perth, 28th, 0·13; Albany, 28th, 0·22; 29th, 0·04; Esperence Bay, 28th, 0·21, and 29th, 0·54.

South Australia reports weather generally cloudy, dull, and sultry; cool inland to Charlotte; prevailing winds, N.W. to S.W., and fresh; moderate sea and rising barometers on southern coast. Rainfall—Eucla, 0·10; and Cape Borda, 0·13.

Victoria.—Generally cloudy and unsettled; smooth sea; falling barometers, and light variable winds on coast. Fine but cloudy inland, with fresh north wind.

Tasmania.—Cloudy on north coast, with light S. wind.

New Zealand.—Russell, barometer 30·40, wind S.W., dull; Wellington, barometer 30·00, wind N.W., fine; Bluff, barometer 30·10, wind W., 40, fine; Gisborne, wind N.W., 40.

New South Wales.—Generally fine and clear, prevailing winds, light from N.E. to S.E., and calm. Smooth sea, steady barometer, and light N.E. wind on coast.

Queensland.—Cloudy in S., fine in N.; prevailing winds S.E.; sea moderate. Rainfall: Brisbane, 0·18; and Cape Moreton, 0·04.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N., gloomy, hot, barometers falling, temperature 91°; Cape Otway, N.N.E. 6, gloomy, moderate sea, temperature 71°; Portland N.N.E., overcast, smooth sea, temperature 66°; Wilson's Promontory, N. 18, fierce hot wind, smooth sea, temperature 91°.

New South Wales.—Albury, S.W., fine very hot, temperature 84°; Cape St. George, N. 42, fine, smooth sea, temperature 72°; Deniliquin, N. 28, hot, temperature 95°; Dubbo, N. 14, fine, temperature 83°; Eden, N.E. 28, fine, smooth sea, temperature 68°; Goulburn, N.W., fine hot, temperature 79°; Menindie, N., fine hot, temperature 102°; Moruya, N.E., 42, cloudy, moderate sea, temperature 69°; Newcastle, N.E. 13, no sea, temperature 70°; Port Macquarie, N.N.E. 42, fine, smooth sea, temperature 75°; Sydney, N.E. 13, fine, smooth sea, temperature 74°; Wentworth, N.W., dull very hot, temperature 96°. Walgett, N.E., fine clear, temperature 94°.

It appears from the 3 p.m. Melbourne telegrams that a fierce hot wind was blowing over Melbourne and Wilson's Promontory, with temperature up to 91°; but at Portland and Cape Otway it was quite cool.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Balranald, 6 feet 3 inches above summer level. Murray: At Albury, 3 feet 9 inches above summer level; at Euston, 10 feet 4 inches above summer level. Darling: At Wentworth, 11 feet 10 inches above summer level; at Pooncarie, summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR OCTOBER 31.

Sun rises at 5.2, sets at 6.26; Moon, 12.44 a.m., 11.22 a.m.; Mercury, 5.27 a.m., 7.6 p.m.; Venus, 7.26 a.m., 9.59 p.m.; Mars, 1.53 a.m., 12.35 p.m.; Jupiter, 3.14 a.m., 3.7 p.m.; Saturn, 10.57 p.m., 8.53 a.m. New moon, 8th; full moon, 24th.

High water at Fort Denison, October 31, 1.10 a.m., 1.38 p.m.

METEOROLOGICAL REPORTS AND MAP FOR OCTOBER 31, 1885.

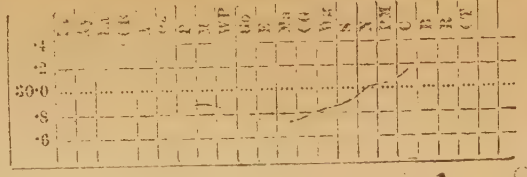
Stations	wt	Mx	Mn	R'in
Albury	u	100	68	0·32
Armidale	b	85	56	0
Balranald	g	109	57	0
Bathurst	c	94	54	0
Bend'm'r	–	–	–	—
Bodalla ..	–	–	–	—
Bourke ..	g	109	71	0·08
C'md'n H.	b	75	65	0
C. St. Geo.	c	88	61	0
Carcoar ..	g	82	66	0
Casino ..	b	82	61	0
Cassilis .	b	87	68	0
Clarence	b	82	63	0
C'nd'b'lin	u	76	61	0
Cooma ..	g	97	51	0
Coonab'n	c	95	61	0
C'nam ble	u	—	—	0
Cowra ..	c	86	58	0
Deniliq'n	g	104	68	0·04
Dubbo .	c	97	66	0
Eden ..	f	77	58	0
Euston ..	g	108	60	0
Forbes ..	b	101	73	0
Gl'n Inn's	b	88	53	0
Goulburn	b	93	55	0
Grafton ..	c	81	66	0
Gunned'h	c	95	67	0
Hay	u	103	68	0
Hill End	b	—	—	0
Inverell ..	b	83	60	0
Kiandra	c	82	49	0
Lismore	c	83	60	0
Maitland	b	91	62	0
Marsdens	–	—	—	–
Menindie	b	104	74	0
Molong ..	u	95	54	0
Moree ..	c	92	65	0
Moruya ..	c	73	57	0
Moss Vale	c	84	61	0
M. Vict'ria	c	89	55	0
Mudgee ..	c	97	54	0
M'rr'mb'h	c	93	60	0
M rr'r'ndi	c	89	68	0
Mus'lb'r'k	b	104	60	0
Narrabri	c	99	67	0
Newcastle	b	77	63	0
Nowra ..	b	87	57	0
Orange ..	g	84	56	0
Picton ..	b	90	55	0
P. M'q'rie	b	77	63	0
P.St'ph'ns	b	79	60	0
Q'nbeyan	b	89	62	0
Quirindi	b	96	65	0
Singleton	b	91	66	0
SYDNEY ..	c	80	62	0
Tamw'rth	b	92	57	0
Taralga ..	b	98	54	0
Taree	b	84	61	0
T'nt'rfield	b	82	60	0
Wagga ..	r	100	66	0
Walcha ..	b	82	51	0
Walgett ..	u	98	75	0
W'ntw'rth	c	104	63	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	60	0
Young ..	u	97	76	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 30 41·459
Total Rainfall from January 1st to October 31.... 34·904
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports scattered clouds north of Farina, with westerly winds; weather has been showery inland, heaviest over the Mount Lofty Ranges, in places half an inch of rain has fallen.

Victoria.—Generally cloudy and dull; fresh westerly winds and showery on coast, with falling barometer, and moderate sea. Light N.N.W. wind and dull inland at Omeo. Rainfall—Melbourne, 0·73; Portland, 0·09; Cape Otway, 0·03; Omeo, 0.01.

Tasmania.—Dull on north coast, with light N.N.W. wind. Rainfall—Low Heads, 0·01.

New Zealand.—Russell, barometer 30·30, wind N.W.; Wellington, barometer 30·00, wind N.W.; Bluff, barometer 29·70, wind N.W., fine generally.

New South Wales.—Generally fine, clear, and warm, with fresh northerly winds and falling barometers. Dull and threatening over the whole S.W. district and many places in the west. (See map above.) Raining at Wagga. Albury reports 0·32 rain since yesterday. On the coast the weather is generally fine, with smooth sea, northerly winds, and rapidly falling barometers.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, no telegrams; Cape Otway, W., 12, misty, rough sea, temperature 63°; Portland S.W., 36, cloudy, smooth sea, temperature 63°; Wilson's Promontory, line down; Low Heads, N.E. 24, heavy rain, moderate sea, temperature 66°.

New South Wales.—Albury, W., light rain, temperature 74°; Cape St. George, N.E. 42, like a storm, moderate sea, temperature 72°; Clarence River, N.E., 20, fine, moderate sea, temperature 73°; Deniliquin, N., fine, temperature 76°; Dubbo, N.W., raining, temperature 74°; Eden, N.E., 14, cloudy, little sea, temperature 70°; Goulburn, N.N.W., cloudy, temperature 78°; Menindie, S.W., 18, stormy, temperature 80°; Newcastle, N.E., strong, fine, smooth sea, temperature 75°; PortMacquarie, N.N.E., 30, hazy, moderate sea, temperature 72°; Sydney, N.E., 20, cloudy, smooth sea, temperature 75°; Walgett, calm, showery, temperature 77°.

Sydney, 5.30 p.m., thunderstorm from N.W., with shower of rain.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Hay, 2 feet 9 inches above summer level; at Balranald, 6 feet 2 inches above summer level. Murray: At Albury, 3 feet 8 inches above summer level; at Euston, 15 feet 4 inches above summer level. Darling: At Wentworth, 12 feet above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

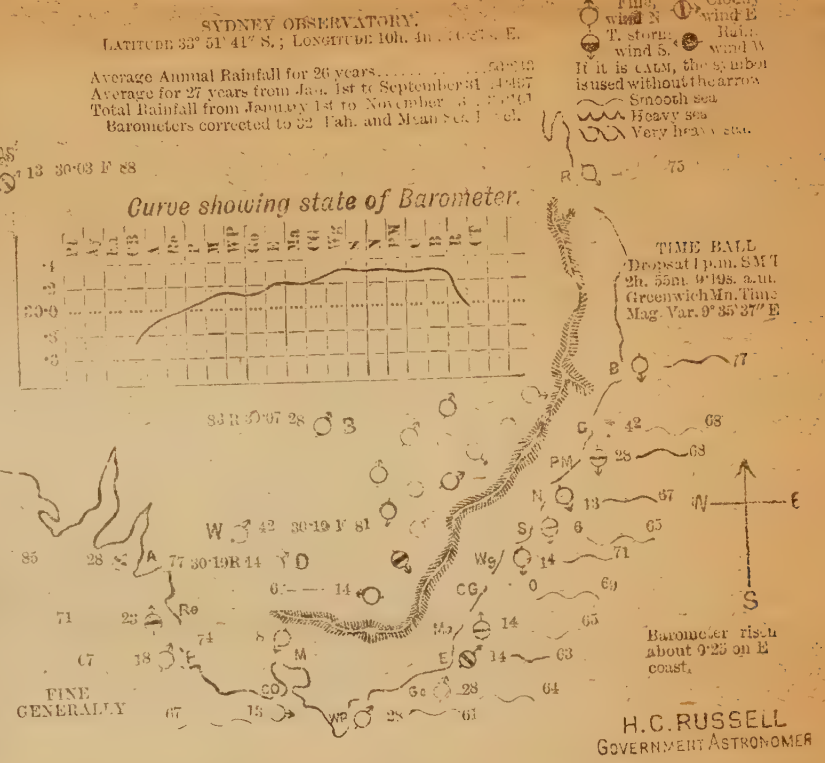
ASTRONOMICAL MEMORANDA FOR NOVEMBER 2.

Sun rises at 5, sets at 6.27; Moon, 2.11 a.m., 1.29 p.m.; Mercury, 5.28 a.m., 7.14 p.m.; Venus, 7.28 a.m., 10.2 p.m.; Mars, 1.48 a.m., 12.33 p.m.; Jupiter, 3.7 a.m., 3.1 p.m.; Saturn, 10.49 p.m., 8.45 a.m. New moon, 8th; full moon, 22nd.

High water at Port Denison, November 2, 3.29 a.m., 4.8 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 3, 1889.

Stations	wt	Mx	m	r'in
Albury	b	83 54		0
Armidale	b	73 54		0
Balranald	b	94 50		0
Bathurst	c	81 46		0
Bend'm'r	b	81 50		0
Bodalla ..	g	75 52		0
Bourke ..	b	92 60		0
C'md'n H.	c	73 63		0
C. St. Geo.	c	69 56		0
Carcoar ..	b	74 61		0
Casino ..	c	81 61		0
Cassilis ..	b	76 59		0
Clarence	u	72 61		0
C'nd'b'lin	b	72 53		0
Cooma ..	c	75 51		0
Coonab'n	b	85 52		0
C'nam ble	b	—	—	0
Cowra ..	b	76 69		0
Deniliq'n	b	87 52		0
Dubbo ..	b	87 58		0
Eden	c	71 54		0
Euston ..	b	92 57		0
Forbes ..	b	84 53		0
Gl'n Inn's	b	83 55		0
Goulburn	g	79 52		0
Grafton ..	b	81 62		0
Gunned'h	b	87 62		0
Hay	—	—	—	—
Hill End	b	—	—	0
Inverell ..	b	79 54		0
Kiandra	c	71 45		0
Lismore	c	88 66		0
Maitland	b	81 55		0
Marsdens	b	81 64		0
Menindie	b	82 63		0
Molong ..	b	86 55		0
Moree ..	b	91 62		0
Moruya ..	g	71 58		0
Moss Vale	g	67 53		0
M. Vict'ria	u	73 47		0·02
Mudgee ..	b	85 53		0
M'rr'mb'h	—	—	—	—
M rr'r'ndi	b	77 58		0
Mus'lb r'k	u	82 55		0
Narrabri	b	97 61		0
Newcastle	b	69 61		0
Nowra ..	c	75 57		0
Orange ..	b	74 52		0
Picton ..	c	76 60		0
P. M'q'rie	c	74 55		0
P. St'ph'ns	b	75 55		0
Q'beyan	b	72 59		0
Quirindi	b	86 56		0
Singleton	b	78 59		0
SYDNEY ..	c	70 60		0
Tamw'rth	b	85 61		0
Taralga ..	u	82 46		0
Taree	c	81 57		0·01
T'nt'rfield	c	82 54		0
Wagga ..	b	88 56		0
Walcha ..	b	72 48		0·05
Walgett ..	b	91 66		0
W'ntw'rth	b	88 62		0
Wilcannia	c	—	—	0
W'll'ng'ng.	b	77 58		0
Young ..	b	85 54		0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Rc, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them and southerly following.

Western Australia.—Cloudy and showery with light S. winds. Rainfall: Geraldton, 0·06; Perth, 0·50; Albany, 0·78; and Esperance Bay, 0·18.

South Australia.—Generally dull and hazy, hot inland, scattered clouds on and near coast; winds generally from N.E. to N., and moderate to fresh in force. No rain. Strong N.E. wind and dusty inland at Farina.

Victoria.—Generally fine and clear throughout, with light variable winds; smooth and moderate sea, and steady barometer on coast. No rain.

Tasmania.—Fine and clear on N. coast, with light N.N.E. winds.

New Zealand.—Russell, barometer 30·00, wind N.E., showery; Wellington, barometer 29·89, showery, rain 0·62; Bluff, barometer 30·00, wind E.

New South Wales.—Generally fine and clear, cloudy in places on coast and mountains; but no rain falling, and but little measured (vide map above); winds southerly on coast, N.E. inland; barometers rising rapidly, especially in N. Sea smooth.

Queensland.—Generally fine and clear; cloudy north of Townsville; winds generally S.E. and S.; sea moderate. Rain recorded Cape Moreton, 0·32.

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, E., 16, cloudy, temperature 77°; Portland, E.N.E., 18, fine, smooth sea, temperature 77°; Wilson's Promontory, N.E., 23, hazy and squally, moderate sea, temperature 70°.

New South Wales.—Albury, W., cloudy, temperature 74°; Cape St. George, E.N.E., 14, fine, smooth sea, temperature 69°; Clarence River, S., 14, fine, smooth sea, temperature 75°; Deniliquin, N.E., 14, fine, temperature 68°; Dubbo, N.W., fine, temperature 76°; Eden, NE., 12, fine, moderate sea, temperature 68°; Goulburn, E., 14, fine, temperature 69°; Moruya, N.E., 28, fine, smooth sea, temperature 67°; Newcastle, S.S.E., 14, fine, smooth sea, temperature 67°; Port Macquarie, S.E., 28, fine, smooth sea, temperature 77°; Sydney, E., 14, fine, smooth sea, temperature 67°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 1 inch above summer level at Balranald, 4 feet 9 inches above summer level. Murray: At Wentworth, 12 feet 4 inches above summer level; at Euston, 15 feet 3 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 4.

Sun rises at 4.59, sets at 6.29; Moon, 3.28 a.m., 3.34 p.m.; Mercury, 5.29 a.m., 7.22 p.m.; Venus, 7.30 a.m., 10.5 p.m.; Mars, 1.39 a.m., 12.30 p.m.; Jupiter, 3.0 a.m., 2.55 p.m.; Saturn, 10.41 p.m., 8.37 a.m. New moon, 7th; full moon, 22nd.

High water at Port Denison, November 4, 5.23 a.m., 6.24 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 4, 1885.

Stations	W.T.	M'x	M'n	R'n
Albury	—	87·61	0	
Adelaide	b	74·62	0	
Balranald	—	104·64	0	
Bathurst	—	83·48	0	
Bend'm'r	b	81·46	0	
Bodalla	—	—	—	
Bourke	b	105·75	0	
G'md'n H.	b	73·60	0	
C. St. Geo.	b	72·59	0	
Carcoar	b	75·56	0	
Casino	b	81·47	0	
Cassilis	b	76·57	0	
Clarence	c	78·57	0	
C'nd'b'lin	c	77·55	0	
Cooma	g	82·48	0	
Cootamundra	b	88·49	0	
Cr'mm'r'k	b	—	—	0
Cowra	b	79·	—	0
Deniliquin	u	94·65	0	
Dubbo	c	86·60	0	
Eden	c	68·58	0	
Forbes	c	[illegible]	[illegible]	0
Forster	b	93·62	0	
Glen Innes	b	87·70	0	
Goulburn	b	79·[illegible]	[illegible]	
Grafton	c	83·[illegible]	[illegible]	0
Gunned'h	—	—	—	—
Hay	b	93·58	0	
Hill End	b	—	—	0
Inverell	b	82·53	0	
Kandos	c	72·44	0	
Lithgow	c	81·61	0	
Maitland	c	76·55	0	
Marsdens	u	87·68	0	
Menindie	q	93·76	0	
Molong	b	100·56	0	
Moree	b	93·63	0	
Moruya	b	71·65	0	
Moss Vale	c	69·51	0	
M. Vict'ria	b	78·47	0	
Mudgee	c	87·49	0	
M'r'mb'n	—	—	—	—
M'r'r'ndi	b	80·53	0	
Muswellbr'k	b	81·48	0	
Narrabri	b	99·62	0	
Newcastle	c	72·60	0	
Nowra	b	76·53	0	
Orange	c	75·49	0	
Picton	b	78·50	0	
P. M'q'rie	b	75·56	0	
P. St'phens	c	76·56	0	
Quiberyan	b	71·56	0	
Quirindi	c	88·56	0	
Singleton	b	77·58	0	
SYDNEY	b	72·56	0	
Tamw'rth	b	87·56	0	
Taralga	b	73·42	0	
Taree	b	84·53	0	
Tent'rfield	b	78·52	0	
Wagga	b	91·61	0	
Walcha	b	75·44	0	
Walgett	c	95·68	0	
W'ntw'rth	c	95·72	0	
Wilcannia	b	—	—	0
W'll'ng'ng	b	78·58	0	
Young	c	91·55	0	

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is blowing. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne, WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong, S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River: B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy with fresh S.W. wind, and moderate sea. Rough sea and raining at Albany. Rainfall: Albany, 0·14; Esperance Bay, 0·23; Geraldton, 0·50.

South Australia reports weather generally dull; prevailing winds N.W. to S.W., and light to moderate in force; smooth sea and steady barometers on coast. No rain.

Victoria.—Generally cloudy and dull; light to fresh northerly winds; falling barometers and smooth sea on coast; N. E. wind and dull inland at Echuca. No rain.

Tasmania.—Hazy and calm on N. coast.

New Zealand.—Russell, barometer 29·70, wind S.W. 34, showery; Wellington, barometer 29·70, wind S.W. 28, gusty and showery in night; Bluff, barometer 29·90, wind N.W.; fine.

New South Wales.—Generally fine and clear; severe dust storms, with hot northerly winds reported from the districts on and near the Darling; temperature about 95° Fah. Smooth sea, falling barometer, and fresh N.E. winds on coast. No rain. (Details in map above.)

Queensland.—Fine at Brisbane; cloudy in N., at Townsville and Rockhampton. No rain recorded. Winds, S.E., and light.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, N.W., very clear, temperature 80°; Cape St. George, N., 72, fine, smooth sea, temperature 70°; Clarence River, N.E., 68, smooth sea, temperature 73°; Deniliquin, N.W., cloudy, like storm, temperature 92°; Dubbo, W.N.W., 14, fine, temperature 81°; Eden, E.N.E., 8, fine, slight sea, temperature 73°; Goulburn, N.W., fine, temperature 76°; Menindie, N.W., clouds of sand, temperature 89°; Moruya, N.E., 12, hazy, moderate sea, temperature 67°; Newcastle, N.E., fine, smooth sea, temperature 71°; Sydney, N.E., 8, light clouds, smooth sea, temperature 74°; Wentworth, N.W., 14, cloudy, hot, temperature 81°.

Victoria.—Melbourne, N.N.E., 13, dull, temperature 80°; Cape Otway, W., 13, dull, slight sea, temperature 76°; Portland, W.N.W., 28, dull, smooth sea, temperature 76°; Wilson's Promontory, N.N.E., 23, cloudy, sultry, moderate sea, temperature 75°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 4 feet 9 inches above summer level; at Hay, 2 feet 6 inches above summer level; at Balranald, 4 feet 8 inches above summer level. Murray: At Albury, 3 feet 1 inch above summer level; at Euston, 15 feet 2 inches above summer level. Darling: At Wentworth, 12 feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 4.

Sun rises at 4.58, sets at 6.30; Moon, 4.6 a.m., 4.34 p.m.; Mercury, 5.30 a.m., 7.26 p.m.; Venus, 7.31 a.m., 10.6 p.m.; Mars, 1.41 a.m., 12.29 p.m.; Jupiter, 2.57 a.m., 2.52 p.m.; Saturn, 10.37 p.m., 8.33 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 4, 6.49 a.m., 7.13 p.m.

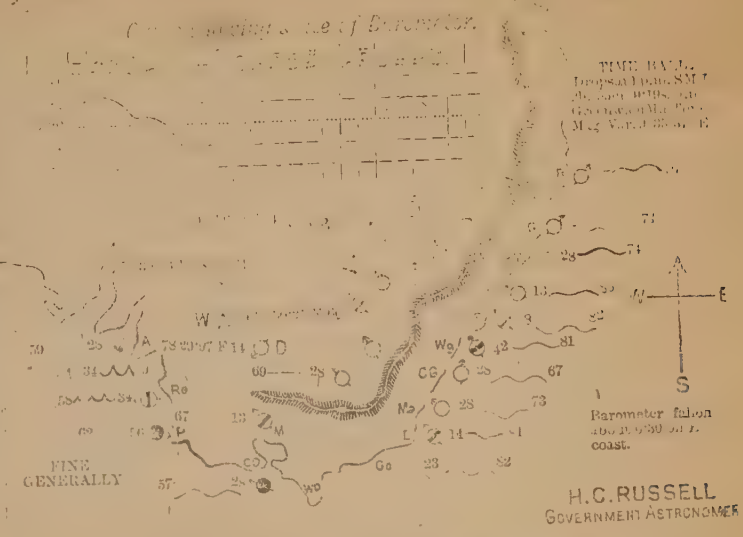
DAILY REPORTS AND MAP FOR

Albury	b	94·67	0·22	
Armidale	b	84·58	0	
Balranald	b	109·51	0·01	
Bathurst	c	91·63	0	
Bend'n'r	b	88·41	0	
Bodalla	b	85·16	0	
Bourke	c	108·51	0	
[illegible]	b	[illegible]		
C. Sidon	c	[illegible]		
Cootamundra	q	[illegible]		
Casino	b	[illegible]		
Cessnock	c	86·57	0	
Clarence	c	84·[illegible]		
Cudal	[illegible]	85·04	0	
Cooma	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]		
Cowra	b	[illegible]		
Deniliq'n	b	[illegible]		
Dubbo	c	95·66	0	
Eden	c	80·58	0	
Euston	b	105·35	0	
Forbes	b	98·73	0	
Gl'n Inn's	—	—	—	
Goulburn	b	86·62	0	
Grafton	b	86·57	0	
Gunned'h	b	96·67	0	
Hay	b	104·63	0	
Hill End	u	—	—	
Inverell	b	83·53	0	
Kiandra	r	72·54	0	
Lismore	b	88·59	0	
Maitland	b	88·50	0	
Marsdens	b	95·63	0	
Menindie	c	100·68	0	
Molong	b	92·85	0	
Moree	b	92·65	0	
Moruya	c	90·63	0	
Moss Vale	c	82·62	0	
M. Victoria	c	92·69	0	
Mudgee	c	93·54	0	
M'rr'mb'h	c	88·69	0	
M'rr'ndi	b	87·69	0	
Mus'lbr'k	c	96·63	0	
Narrabri	b	100·68	0	
Newcastle	c	86·61	0	
Nowra	b	83·63	0	
Orange	c	82·59	0	
Picton	u	91·59	0	
P. M'q'rie	c	76·60	0	
P. St'ph'ns	c	74·61	0	
Q'nbeyan	b	81·64	0	
Quirindi	b	93·62	0	
Singleton	b	92·61	0	
SYDNEY	g	83·64	0	
Tamw'rth	c	93·52	0	
Taralga	b	88·46	0	
Taree	b	86·58	0	
T'nt'rfield	c	89·51	0	
Wagga	b	98·70	0	
Walcha	c	83·46	0	
Walgett	b	99·71	0	
W'ntw'rth	c	97·57	0	
Wilcannia	b	—	—	
W'll'ng'ng	c	80·63	0	
Young	c	90·63	0	

SYDNEY OBSERVATORY

LATITUDE 33° 51′ 41″ S.; LONGITUDE 11h. 4m. 52·8s. E.

Average Annual Rainfall for 26 years ..... 50·42
Average for 27 years from Jan. 1st to September 31 44·37
Total Rainfall from January 1st to November 5 35·132
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations on the map headed W.T. gives the state of the weather at 9 a.m., b stationary or blue sky, c. cloudy or fair clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; r, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'X gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the sea temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Al, Albany; Fa, Eucla; CB, Cape Borda; A, Adelaide; Pe, Port Pirie; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G, Jervis Bay; W g, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ck, Cooktown. Inland the state of barometer is given in figures at Albury, Bendigo, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curves enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine on W. coast, with light N. winds and smooth sea; cloudy on S. coast, showery at Albury. Rain, 0·14; sea smooth.

South Australia.—Generally cloudy and cool, squally on and near coast, wind S.W. to N.W. and freshening; strong westerly winds, rough sea, and rising barometers on coast. Rainfall: Port Darwin, 0·20; Streaky Bay, 0·01; Cape Borda, 0·01; Robe, 0·02; M'Donnell Bay, 0·03.

Victoria.—Cloudy and raining on coast, with strong W.N.W. winds and moderate sea; fine, with fresh N.N.E. wind inland at Omeo. Rainfall: Cape Otway, 0·01; Cape Schanck, 0·21; Omeo, 0·30.

Tasmania.—Squally from W.N.W. on N. coast. Rain: Low Heads, 0·09.

New Zealand.—Russell: Barometer, 29·60; wind, S.W., 28, gloomy. Wellington: Barometer, 29·30; wind, [illegible], 18, gloomy. Barometer, 29·70; wind, N.W., fine. Gisborne: Wind, S., 40, dull.

New South Wales.—Generally fine and warm, with strong hot N.W. winds; smooth sea and falling barometer on coast. Temora reports thunderstorm from W.; rain, 0·08. Tenterfield also reports thunderstorm at 4 a.m.; and Kiandra, at 9 a.m., reports thunderstorm approaching, but gives no direction.

Queensland.—Generally fine and clear, with S.E. winds and moderate sea. Dull at Cooktown; rain, 0·17.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, W., 23, fine, squally, temperature 68°; Cape Otway, W., 23, raining, misty, and squally, very high sea, temperature 55°; Portland, W., 56, raining, smooth sea, temperature 58°.

New South Wales.—Albury, N.W., fine, temperature 71°; Cape St. George, W., 56, hot, slight sea, temperature 96°; Clarence River, N.E., fine, rough sea, temperature 75°; Deniliquin, S.W., 28, fine, temperature 80°; Dubbo, N.W., 28, fine, temperature 82°; Eden, S.E., 28, fine, slight sea, temperature 67°; Goulburn, N.W., fine, temperature 80°; Menindie, S.W., 28, fine, temperature 80°; Moruya, W., 40, fresh gale, moderate sea, temperature 94°; Newcastle, N.W., fine, temperature 93°; Sydney, W.N.W., 18, fine, hot wind, smooth sea, temperature 96°; Wentworth, W., 28, fine, temperature 72°; Walgett, N.W., hot, temperature 99°.

The day has been unusually hot in Sydney and nearly all over the colony, the maximum at the Observatory being 97·6. The wind blew fresh and hot from N.W. all day, and towards evening a black looking storm-cloud appeared in the N.W., which passed over the city just before 7 p.m. There was much lightning, but not much thunder, and the wind for a minute reached 60 miles per hour. Only a sprinkle of rain fell.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 feet 3 inches above summer level; at Hay, 2 feet 3 inches above summer level. Murray: at Albury, 3 feet 9 inches above summer level; at Euston, 15 feet 1 inch above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 5.

Sun rises at 4.57, sets at 6.31; Moon, 4.44 a.m., 5.34 p.m.; Mercury, 6.50 a.m., 7.30 p.m.; Venus, 7.32 a.m., 10.7 p.m.; Mars, 1.50 a.m., 12.28 p.m.; Jupiter, 2.54 a.m., 2.49 p.m.; Saturn, 10.33 p.m., 8.29 a.m. New moon, 8th; full moon, 22nd. High water at Port Denison, November 6, 7.35 a.m., 7.57 p.m.

METEOROLOGICAL ABSTRACT, OCTOBER, 1885, with results for the same month during the preceding 26 years:—

	Barometer at 32° Fah. and mn. sea lev'l.	Temperature in Shade.			Rainfall.	
		Mean Max.	Mean Min.	Mean.	Amount Inches.	No. of days.
Oct., 1885 ...	30·151	72·2	57·5	64·9	1·406	10
Average for 27 years ...	30·001	71·0	55·6	63·3	3·037	13
Monthly Extremes:						
Highest ...	30·181	77·7	59·1	68·5	8·645	21
Year ...	1871	1867	1867	1867	1882	1870 & 1884
Lowest ...	29·809	66·9	52·7	59·8	0·210	4
Year ...	1863	1881	1881	1881	1867	1867

Wind.—October, 1885: Prevailing direction, N.E.: prevailing direction for same month for 27 years, N.E.; mean miles per hour, 10·9.

Temperature.—October, 1885: Highest shade temperature, 90·3, on the 31st; highest shade temperature in any October since 1859, 98·1, on the 24th, 1867; lowest shade temperature, 46·7, on the 13th; lowest shade temperature in any October since 1859, 44·0, on the 3rd 1865.

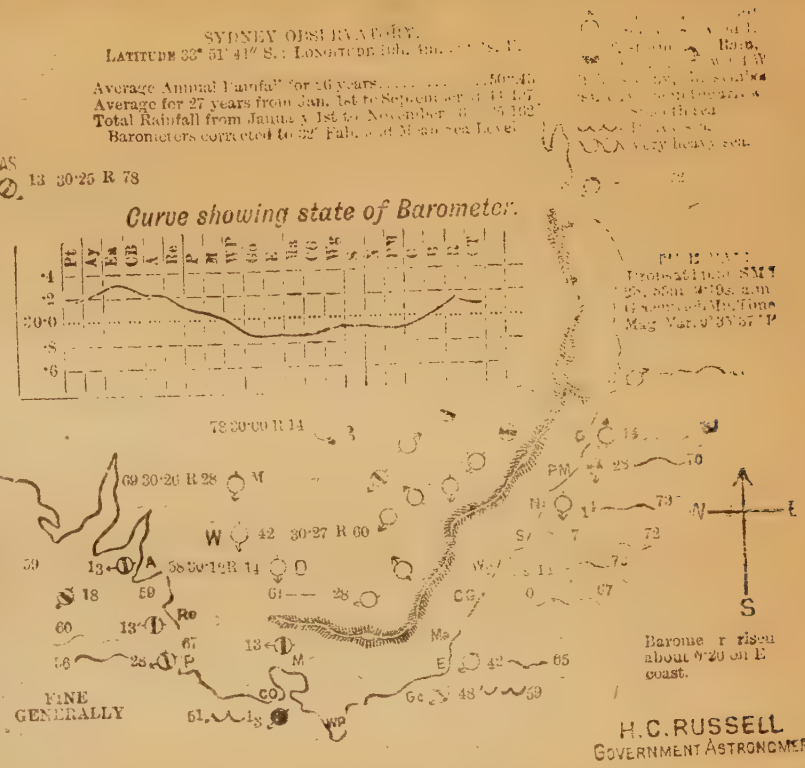
Rainfall.—October, 1885: Greatest fall in one day, 0·963, on the 13th. Greatest fall in one day in any October since [illegible], 4·890, on the 5th, 1877.

H. C. RUSSELL, Government Astronomer.

Observatory, November 5, 1885.

METEOROLOGICAL REPORTS AND MAP [illegible]

Stations	wt	Maxim	Minim	Rain
Albury	b	80	54	0
Armidale	g	86	65	0
Balranald	b	84	40	0
Bathurst	c	90	54	0·14
Bend'm'r	b	88	59	0
Bodalla ..	—	—	—	—
Bourke ..	b	109	71	0
C'md'n H.	b	81	70	0
C. St. Geo.	b	100	56	0
Carcoar ..	b	82	64	0
Casino ..	b	93	64	0
Cassilis .	b	92	70	0
Clarence	c	89	60	0
C'nd'b'lin	c	67	54	0
Cooma ..	b	84	48	0
Coonab'n	c	95	63	0
Cunamble	—	—	—	—
Cowra ..	b	86	74	0
Deniliq'n	b	82	48	0
Dubbo ..	b	97	60	0·01
Eden	c	93	57	0
Eiston ..	b	81	45	0
Forbes ..	b	94	60	0
Gl'n Inn's	c	93	59	0
Goulburn	b	91	52	0
Grafton ..	c	101	63	0
Gunned'h	c	99	76	0
Hay	b	86	50	0
Hill End .	b	—	—	0
Inverell ..	b	85	59	0
Kiandra	c	65	37	0·03
Kismore	b	95	62	0
Maitland	b	101	75	0
Marsdens	b	90	66	0
Menindie	b	84	59	0
Molong ..	b	93	63	0
Moree ..	c	95	69	0
Moruya ..	—	—	—	—
Moss Vale	b	86	57	0
M. Vict'ria	b	88	60	0·05
Mudgee ..	c	93	57	0
M'rr'mb'h	b	88	63	0
M rr'rndi	c	91	71	0
Mus'lb r'k	c	104	65	0
Narrabri	b	106	73	0
Newcastle	b	97	66	0
Nowra ..	b	102	56	0
Orange ..	c	85	54	0
Picton ..	c	98	63	0
P. M'q'rie	c	79	64	0
P.St'ph'ns	c	83	69	0
Q'nbeyan	b	85	59	0
Quirindi	u	85	62	0
Singleton	b	98	77	0
SYDNEY ..	c	98	63	0
Tamw'rth	c	95	65	0
Taralga ..	b	86	49	0
Taree	b	96	68	0
T'nt'rfield	c	88	57	0
Wagga ..	b	86	51	0
Walcha ..	g	82	54	0
Walgett...	c	106	71	0
W'ntw'rth	c	81	50	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	102	62	0
Young ..	b	98	54	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Max, gives the maximum temperature for previous 24 hours. Min the corresponding minimum temperature, and the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, clear or weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown.—Pt, Perth; Ay, Albany; Al, Eucla; CB, Cape Borda; L, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CB, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke and Mildura in spring. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally fine, with light S.E. winds and smooth sea. Barometers falling; no rain.

South Australia reports weather generally fine and cool, with scattered clouds; dull and gloomy in places; prevailing winds W. to S., and light smooth sea; S.W. winds (fresh in places), and rising barometers on coast. Rainfall: Port Darwin, 0·03; Cape Borda, 0·01; and Robe, 0·01.

Victoria.—Generally cloudy on coast, with fresh S.W. wind, rising barometers, and rough sea; fine, with light N. wind inland at Omeo; showery at Cape Otway. Rainfall: Portland, 0·05; Cape Otway, 0·06.

Tasmania.—Fine, but cloudy; fresh W. wind on N. coast. Rainfall: Low Heads, 0·03.

New Zealand.—Russell: Barometer, 29·90; wind, N.W., dull. Wellington: Barometer, 29·50; wind, N.W., fine. Bluff: Barometer, 29·20; wind, S.W., 28, fine.

New South Wales.—Generally fine and clear, dull in places in N.W. on high lands (details in map above). Smooth sea, rising barometers, and light winds on coast. Light N.W. to N.E. winds and calms inland.

Queensland.—Generally fine on E. coast, with N. to S.E. winds and moderate sea. No rain.

3 P.M. OBSERVATIONS.

Victoria.—Barometers steady. Melbourne, S., 12, fine, temperature 54°; Cape Otway, W., 6, misty, rough sea, temperature 56°; Portland, S.W., 36, fine, smooth sea, temperature 60°; Wilson's Promontory, W., 36, squally, rough sea, temperature 50°; Lake Entrance, N.E., fine, moderate sea, temperature 62°.

New South Wales.—Albury, W.S.W., cloudy, fine, temperature 68°; Cape St. George, E., 12, fine, smooth sea, temperature 64°; Clarence River, N.E., 18, cloudy, smooth sea, temperature 72°; Dubbo, Deniliquin, S.S.W., 28, fine, clear, temperature 72°; Dubbo, W.S.W., 14, fine, temperature 81°; Eden, S.S.W., 29, fine, smooth sea, temperature 67°; Goulburn, W., 4, fine, temperature 71°; Moruya, S.E., 14, fine, hazy, smooth sea, temperature 65°; Newcastle, N.E., light, fine, smooth sea, temperature 71°; Port Macquarie, S.S.E., 14, hazy, smooth sea, temperature 82°; Sydney, E., 8, fine, smooth sea, temperature 70°; Wentworth, W.S.W., fine, temperature 91°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 6 inches above summer level; at Hay, 2 feet 3 inches above summer level; at Balranald, 3 feet 10 inches above summer level. Murray: At Albury, 3 feet 9 inches above summer level. Darling: At Wentworth, 12 feet 4 inches above summer level; at Menindie, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 7.

Sun rises at 4.56, sets at 6.32; Moon, 5.23 a.m., 6.33 p.m.; Mercury, 5.31 a.m., 5.33 p.m.; Venus, 7.33 a.m., 10.9 p.m.; Mars, 1.36 a.m., 12.26 p.m.; Jupiter, 2.50 a.m., 2.46 p.m.; Saturn, 10.29 p.m., 9.25 a.m. New moon, 8th; full moon, 22nd.

High water at Port Denison, November 7, 8.17 a.m., 8.36 p.m.

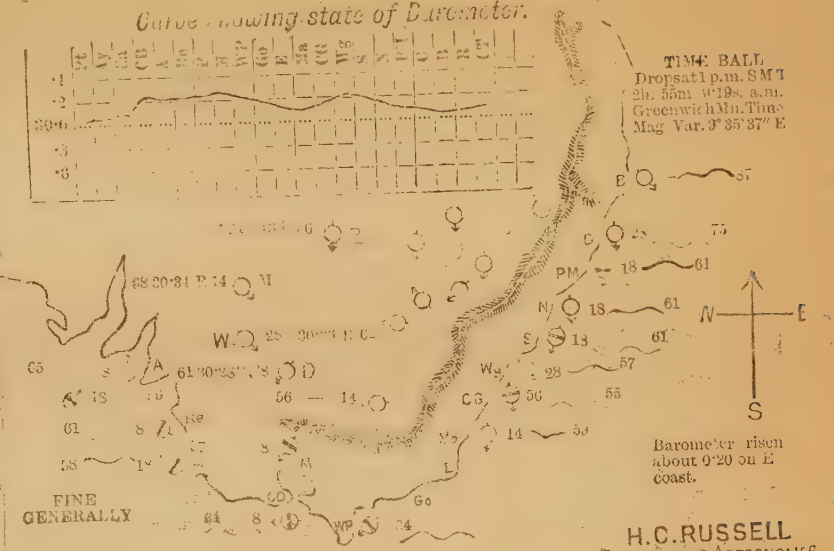
METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 7, 1885.

Stations	WT	MX	MN	R'in
Albury	b	78	47	0
Armidale	b	87	55	0
Balranald	b	80	36	0
Bathurst	b	76	42	0
Bend'm'r	u	89	49	0
Bodalla	b	76	46	0·25
Bourke	b	93	57	0
C'md'n H.	r	79	62	0
C. St. Geo.	c	72	50	0·45
Carcoar	b	73	48	0
Casino	b	102	64	0
Cassilis	b	84	58	0
Clarence	b	92	63	0
C'nd'b'lin	b	68	41	0
Cooma	c	76	40	0·11
Coonab'n	b	85	52	0
C'nam'ble	b	—	—	0
Cowra	b	78	—	0
Deniliq'n	b	75	42	0
Dubbo	b	85	49	0
Eden	—	—	—	—
Euston	b	78	43	0
Forbes	b	78	52	0
Gl'n Inn's	b	87	54	0
Goulburn	g	78	49	0
Grafton	b	93	61	0
Gunned'h	—	—	—	—
Hay	b	86	45	0
Hill End	b	—	—	0
Inverell	b	87	56	0
Kiandra	b	64	35	0
Lismore	b	94	69	0
Maitland	g	88	58	0·13
Marsdens	b	78	52	0
Menindie	b	76	66	0
Molong	b	83	52	0
Moree	b	96	61	0
Moruya	b	71	50	0·13
Moss Vale	c	77	47	0
M. Vict'ria	b	78	43	0
Mudgee	b	86	48	0
M'rr'mb'h	b	80	52	0
M'r'ndi	c	84	61	0
Mosb'r'k	b	99	70	0
Narrabri	b	98	61	0
Newcastle	b	77	57	0·20
Nowra	c	80	52	0·11
Orange	b	71	43	0
Picton	u	83	52	0·06
P. M'q'rie	q	82	55	0·06
P.S'ph'ns	u	79	54	0·32
Q'nbeyan	b	76	50	0
Quirindi	b	82	50	0
Singleton	b	90	64	0
SYDNEY	g	75	55	0·50
Tamw'rth	b	92	62	0
Taralga	b	79	40	0
Taree	b	86	60	0·08
T'nt'rfield	b	91	61	0
Wagga	b	79	45	0
Walcha	b	83	42	0
Walgett	b	93	58	0
W'ntw'rth	b	78	49	0
Wilcannia	—	—	—	—
W'll'ng'ng	b	79	53	0·09
Young	b	87	44	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·242
Average for 27 years from Jan. 1st to Sept. 30th, 31 44·497
Total Rainfall for January 1st to November 6th, 25·162
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W. If it is calm, the symbols are drawn without the arrow. Smooth sea. Heavy sea. Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany, Ea, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne, WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear, with light easterly and variable winds; sea smooth. No rain.

South Australia reports weather generally fine and clear, scattered clouds and dull in places on coast. Prevailing winds, E. to N., and light. Smooth sea and steady barometers on coast. Eucla reports thunderstorm in night; rain, 0·01.

Victoria.—Generally cloudy, with fresh westerly winds, smooth sea, and steady barometers. Dense fog in night at Cape Otway. Rainfall—Melbourne, 0·13; Omeo, 0·05. Fine inland at Echuca, with fresh S. wind.

Tasmania.—Fine and clear on north coast, with fresh W. wind.

New Zealand.—Russell, bar. 29·80, wind N.W., showery; Wellington, bar. 29·50, wind N.W., fine; Bluff, bar. 29·60, wind S.W., fine.

New South Wales.—Generally fine and clear, with fresh W. to S.E. winds, and rising barometers; cloudy in places (see map). Heavy weather, storm at Sydney in night; measure of rain 0·50, being the greatest reported at any station. Moderate and smooth sea on coast.

Queensland. Fine and clear on E. coast, with light S.E. to N.E. winds, and calms and moderate sea; no rain.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, clear, temperature 66°; Cape St. George, S., 28, fine, moderate sea, temperature 61°; Deniliquin, S.W., fine, temperature 70°; Dubbo, S.E., fine, temperature 77°; Eden, S.W., 14, fine, little sea, temperature 68°; Goulburn, calm, fine, temperature 69°; Menindie calm, fine, clear, temperature 74°; Moruya, S.E., 14, fine, smooth sea, temperature 63°; Port Macquarie, S., 30, fine, smooth sea, temperature 69; Sydney, S.E., 10, fine, smooth sea, temperature 64°; Wentworth, W.N.W., 14 fine, temperature 70; Walgett, S.S.E., 20, fine, temperature 81°.

Victoria.—Cape Otway, W.S., fine, smooth sea, temperature 62°. Portland, S., 18, fine, smooth sea, temperature 63°; Wilson's Promontory, W., 21, fine, moderate sea, temperature 59°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Hay, 2 feet above summer level; at Balranald, 3 feet 6 inches above summer level. Murray: At Albury, 3 feet 7 inches above summer level; at Euston 14 feet 11 inches above summer level. Darling: At Wentworth, 12 feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 9.

Sun rises at 4.54, sets at 6.34; Moon, 6.50 a.m., 8.24 p.m.; Mercury, 5.33 a.m., 7.40 p.m.; Venus, 7.35 a.m., 10.11 p.m.; Mars, 1.31 a.m., 12.23 p.m.; Jupiter, 2.43 a.m., 2.40 p.m.; Saturn, 10.21 p.m., 8.17 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 9, 9.35 a.m., 8.53 p.m.

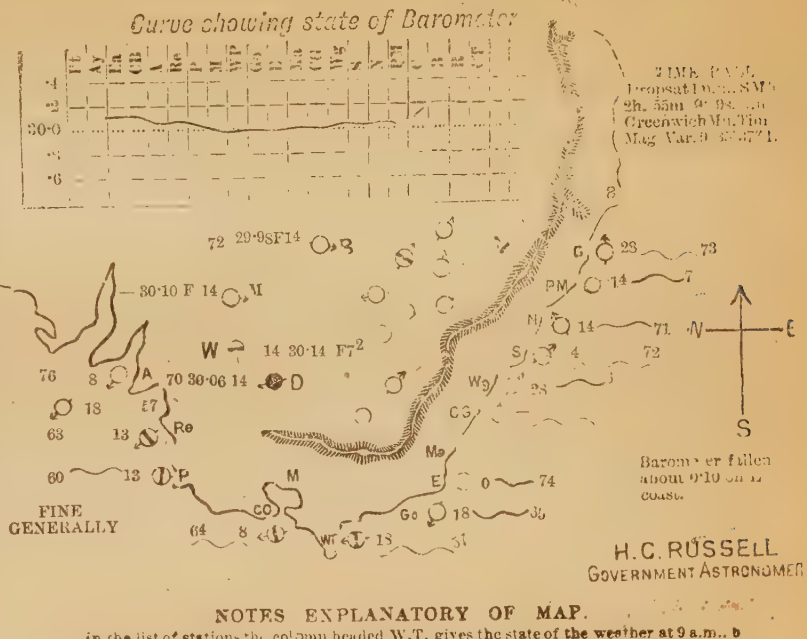
METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 9, 1885.

Stations	wt	Mx	Mn	r'in
Albury	b	83	49	0
Armidale	b	78	17	0
Balranald	c	101	59	0
Bathurst	b	77	43	0
Bend'm'r	b	80	44	0
Bodalla ..	–	--	–	--
Bourke ..	b	99	70	0
C'nd'n H.	b	72	54	0
C. St. Geo.	b	70	55	0
Carcoar ..	b	73	56	0
Casino ..	b	82	41	0
Cassilis ..	b	79	53	0
Clarence	b	81	58	0
C'nd'b'lin	c	74	41	0
Cooma ..	c	81	44	0
Coonab'n	c	86	54	0
C'nam'ble	b	—	—	—
Cowra ..	r	75	68	0
Deniliq'n	b	92	49	0
Dubbo .	b	67	53	0
Eden	c	74	54	0
Euston ..	b	98	63	0
Forbes ..	b	90	50	0
Gl'n Inn's	b	87	46	0
Goulburn	b	78	40	0
Grafton ..	b	85	55	0
Gunned'h	–	--	–	0
Hay	c	91	41	0
Hill End	b	—	–	0
Inverell ..	c	79	49	0
Kiandra	b	68	31	0
Lismore	b	83	57	0
Maitland	b	77	50	0
Marsdens	b	83	61	0
Menindie	b	85	70	0
Molong ..	u	84	48	0
Moree ..	b	90	65	0
Moruya ..	–	—	—	--
Moss Vale	b	76	46	
M. Vict'ria	b	80	43	0
Mudgee ..	b	97	46	0
M'rr'mb'h	–	—	—	0
M rr'r'ndi	b	76	52	0
Mus'lb r'k	b	83	52	0
Narrabri	b	90	53	0
Newcastle	b	73	58	0
Nowra ..	–	—	—	0
Orange ..	b	73	43	0
Picton ..	q	82	47	0
P. M'q'rie	c	78	53	0
P.St'ph'ns	b	72	53	0
Q'nbeyan	b	74	70	0
Quirindi	b	84	52	0
Singleton	b	82	55	0
SYDNEY ..	b	73	57	0
Tamw'rth	–	--	—	0
Taralga ..	b	82	43	0
Taree	b	78	54	0·03
T'nt'rfield	c	85	45	0
Wagga ..	b	88	44	0
Walcha ..	b	75	43	0
Walgett ..	c	95	63	0
W'ntw'rth	c	93	67	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	73	51	0
Young ..	b	84	48	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·51s. E.

Average Annual Rainfall for 26 years..... 50·43
Average for 27 years from Jan. 1st to September 31 44·297
Total Rainfall from January 1st to November 9 35·167
Barometers corrected to 32° Fah. and Mean Sea Level

Fair, wind N. County, wind E. Rain, wind S. Thunder, wind W. If it is cloudy, the symbol is used with indicators of Smooth sea. Heavy sea. Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers, r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown.—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe, P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong, S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—At Albany cloudy, with light S.W. wind, rising barometer and smooth sea.

South Australia.—Generally fine and warm, with scattered clouds, light S.E. and S.W. winds, and smooth sea. Rainfall: At Eucla, 0·30; Alice Springs, 0·59.

Victoria.—Generally cloudy, light westerly winds, falling barometers, and smooth sea; misty at Cape Otway and Wilson's Promontory; no rain.

New South Wales.—Fine generally, variable light winds and calm, falling barometers generally, and smooth sea. (For particulars, &c., see map above.)

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 11 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, 3 feet 6 inches above summer level; at Euston 14 feet 1 inch above summer level. Darling: At Wentworth, 12 feet 4 inches above summer level; at Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 10.

Sun rises at 4.54, sets at 6.55; Moon, 7.36 a.m., 9.16 p.m.; Mercury, 5.34 a.m., 7.43 p.m.; Venus, 7.36 a.m., 10.12 p.m.; Mars, 1.29 a.m., 12.22 p.m.; Jupiter, 2.40 a.m., 2.57 p.m.; Saturn, 10.17 p.m., 8.13 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 10, 10.12 a.m., 10.30 p.m.

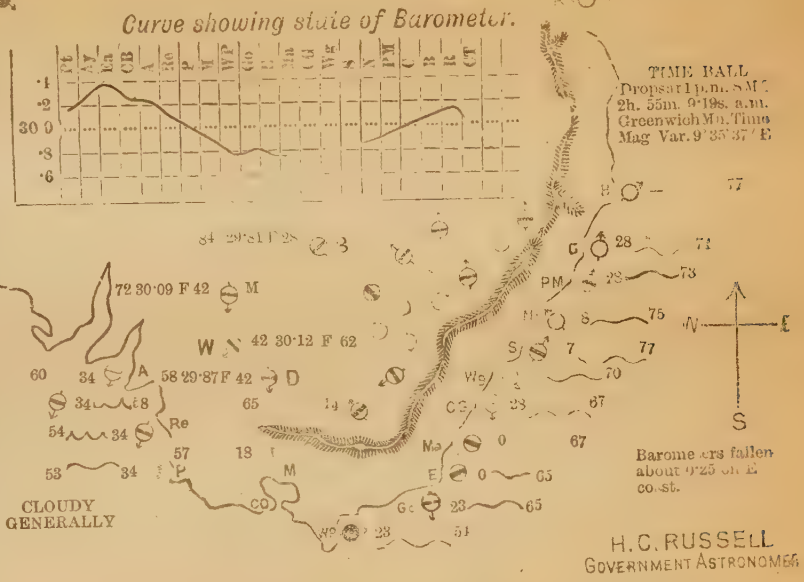
METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 10, 1885.

Stations	wt	Mx	Mn	r'in
Albury	u	81	55	0
Armidale	b	83	58	0
Balranald	g	95	51	0
Bathurst	c	83	51	0
Bend'm'r	b	85	56	0
Bodalla ..	g	87	51	0
Bourke ..	g	108	73	0
C'md'n H.	b	76	65	0
C. St. Geo.	c	76	58	0
Carcoar ..	g	75	57	0
Casino ..	c	96	65	0
Cassilis .	b	80	66	0
Clarence	c	81	58	0
C'nd'b'lin	c	78	51	0
Cooma ..	g	86	44	0
Coonab'n	c	94	55	0
C'nam ble	b	—	—	0
Cowra ..	b	75	—	0
Deniliq'n	u	91	43	0
Dubbo ..	c	94	57	0
Eden	g	74	58	0
Euston ..	g	95	55	0
Forbes ..	b	91	59	0
Gl'n Inn's	g	90	59	0·09
Goulburn	b	86	47	0
Grafton ..	u	88	61	0
Gunned'h	–	—	—	—
Hay	g	88	40	0
Hill End	b	—	—	0
Inverell ..	o	79	65	0
Kiandra	u	73	37	0
Lismore	r	88	64	0
Maitland	b	88	60	0
Marsdens	b	83	66	0
Menindie	g	94	61	0
Molong ..	b	85	50	0
Moree ..	g	89	70	0
Moruya ..	g	77	62	0
Moss Vale	b	—	—	0
M. Vict'ria	c	81	57	0
Mudgee ..	b	87	50	0
M'rr'mb'h	c	81	57	0
M rr'r'ndi	c	80	64	0
Mus'lb r'k	b	97	52	0
Narrabri	b	99	69	0
Newcastle	b	77	63	0
Nowra ..	c	87	57	0
Orange ..	b	76	51	0
Picton ..	b	88	58	0
P. M'q'rie	c	78	62	0
P.St'ph'ns	c	80	60	0
Q'nbeyan	b	80	55	0
Quirindi	b	85	59	0
Singleton	b	90	66	0
SYDNEY ..	g	78	62	0
Tamw'rth	c	88	60	0
Taralga ..	b	85	47	0
Taree	c	85	60	0
T'nt'rfield	u	87	60	0·15
Wagga ..	u	78	57	0
Walcha ..	g	80	53	0
Walgett	g	97	71	0
W'ntw'rth	c	91	56	0
Wilcannia	c	—	—	0
W'll'ng'ng	c	77	57	0
Young ..	c	90	54	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to September 31 44·497
Total Rainfall from January 1st to November 10.. 35 667
Barometers corrected to 32° Fah. and Mean Sea Level

Fine, wind N. — Cloudy, wind I.
T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky, c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane, pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong, S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton, Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine clear weather, with light east winds, smooth sea, and rising barometers on west coast.

South Australia reports weather generally dull and threatening, rain inland. Squally on and near coast. Wind generally fresh from S.W. (force from 23 to 34 miles per hour). Cloudy in Northern Territory; and of the central Australian stations Alice Springs reports raining steadily; and on the north of Spencer's Gulf, Port Augusta, reports squally weather from S., with light rain. Rough sea, rising barometers, and strong S.S.W. winds are reported along the coast. Rainfall measurements: Alice Springs, 0·36; Peake, 0·04; Adelaide, 0·01; Eucla, 0·04; and Robe, 0·06.

Victoria.—Cloudy generally. Showery on coast, with fresh to strong S.W. winds, falling barometers, and slight sea. Fine, but cloudy, with W. wind inland at Echuca. Rainfall: Melbourne, 0·04; Portland, 0·05; Wilson's Promontory, 0·01; and Lake Entrance 0·01.

Tasmania.—Dull, with fresh W. wind on N. coast.

New Zealand.—Russell, bar., 30·00., wind S.E., fine; Wellington, bar., 29·80, wind N.W., fine; Bluff, bar., 29·80, wind S.W., 34, fine.

New South Wales.—Generally cloudy and unsettled; fine at a few stations on the western slopes of the New England table land; threatening rain, especially in places in S.W. and S.; raining steadily at Kiandra; winds generally northerly, but very light and calm at the majority of inland stations, little or no rain has fallen. (Full details will be found in map above.)

Queensland.—Generally fine and clear on E. coast, with light N.E. to W. winds and smooth sea; no rain.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 23, dull, squally, temperature 49.; Cape Otway, W.S.W., 18, showery, squally, slight sea, temperature 51.; Portland, S.W. 48, cloudy, squally with hail, slight sea, temperature 54°; Wilson's Promontory, S.W., 56, showery, rather rough sea, temperature 50°; Lake Entrance, S.W., raining, smooth sea, temperature 59°.

New South Wales.—Albury, N.W., like more rain, temperature 66°; Clarence River, N.E., hazy, smooth sea, temperature [illegible]; Deniliquin, S.W., fine, temperature 76°; Dubbo, W., [illegible], showery, temperature 80°; Eden, S.W., 14, showery, smooth sea, temperature 62°; Goulburn, W., dull, temperature 72°; [illegible], S.W., fine, temperature 76°; Moruya, N.W., 14, showery, [illegible] sea, temperature 63°; Newcastle, N.E., cloudy, smooth sea, temperature 74°; Port Macquarie, N.N.E., 42, hazy, moderate sea, temperature 76; Sydney, S.E., 8, cloudy, smooth sea, temperature 73°; Wentworth, W., fine, temperature 65; Walgett, W.S.W., cloudy, temperature 89°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 10 inches above summer level; at Hay, 1 foot 9 inches above summer level; at [illegible], 2 feet 8 inches above summer level. Murray: At Albury, 3 feet [illegible] inches above summer level; at Euston 14 feet 8 inches above summer level. Darling: At Wentworth, 12 feet 3 inches above summer level; at Pooncarie, Menindie, Wilcannia, and [illegible], low.

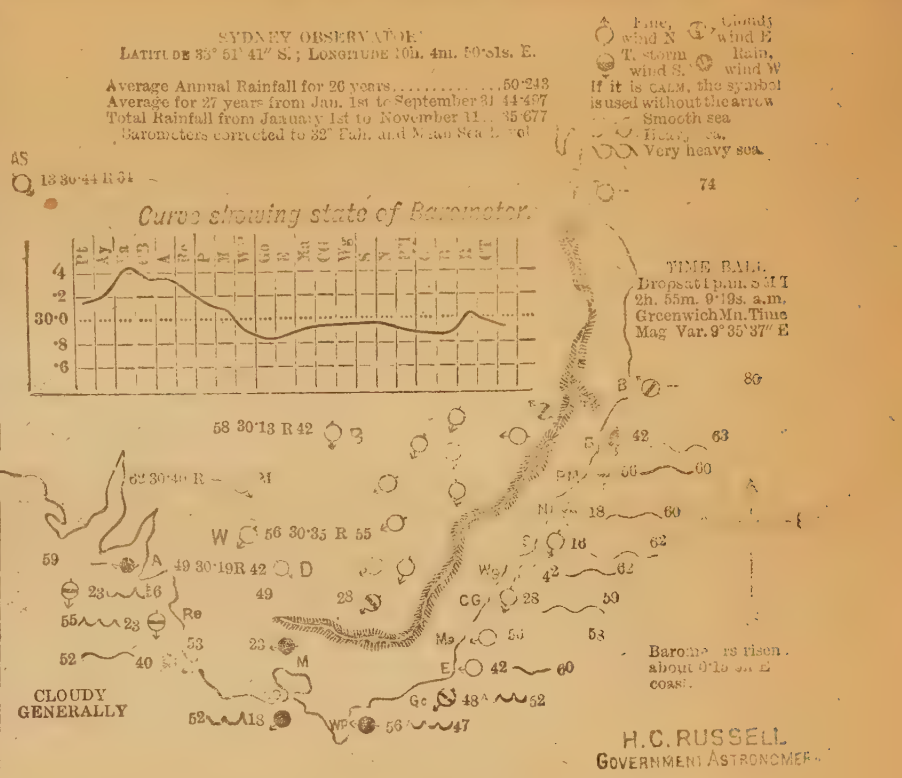
ASTRONOMICAL MEMORANDA FOR NOVEMBER 11.

Sun rises at 4.53, sets at 6.36; Moon, 8.25 a.m., 10.5 p.m.; Mercury, 5.35 a.m., 7.47 p.m.; Venus, 7.37 a.m., 10.13 p.m., Mars, 1.26 a.m., 12.20 p.m.; Jupiter, 2.36 a.m., 2.34 p.m.; Saturn 10.13 p.m., 8.9 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 11, 10.49 a.m., 11.7 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 11, 1885.

Stations	wt	Mx	Mn	R'in
Albury	c	69	41	0·25
Armidale	b	86	50	0·44
Balranald	b	77	32	0
Bathurst	b	84	40	0
Bend'm'r	u	88	45	0·10
Bodalla ..	b	75	44	0·21
Bourke ..	b	95	53	0
C'md'n H.	c	81	62	0
C. St. Geo.	b	69	46	0
Carcoar ..	b	78	41	0
Casino ..	c	68	55	0·31
Cassilis .	b	85	58	0
Clarence	r	81	59	0·41
C'nd'b'lin	b	53	31	0
Cooma ..	b	74	30	0·18
Coonab'n	b	94	48	0
C'nam ble	b	—	—	0
Cowra ..	b	75	66	0
Denilig'n	b	89	39	0
Dubbo ..	b	94	45	0·05
Eden	c	74	47	0·21
Euston ..	c	78	37	0
Forbes ..	b	83	42	0
Gl'n Inn's	g	80	58	0·33
Goulburn	b	84	39	0
Grafton ..	r	95	63	0·57
Gunned'h	b	97	58	0·15
Hay	b	88	40	0
Hill End	b	—	—	0
Inverell ..	b	86	62	0·69
Kiandra	n	63	25	0·79
Lismore	r	88	64	0·13
Maitland	g	96	50	0·03
Marsdens	b	81	51	0
Menindie	b	71	50	0
Molong ..	b	81	43	0
Moree ..	c	93	59	0·65
Moruya ..	b	73	49	0·26
Moss Vale	b	76	42	0
M. Vict'ria	b	81	37	0
Mudgee .	b	88	44	0
M'rr'mb'b	b	78	44	0·02
M rr'r'ndi	b	82	57	0·12
Mus'lbr'k	b	102	53	0
Narrabri	c	94	59	0·03
Newcastle	c	89	56	0
Nowra ..	b	77	47	0
Orange ..	c	80	36	0
Picton ..	b	89	50	0
P. M'q'rie	c	77	60	0·05
P.St'ph'ns	g	81	55	0·09
Q'nbeyan	c	77	44	0·08
Quirindi	b	87	54	0
Singleton	g	91	66	0
SYDNEY ..	b	79	53	0·01
Tamw'rth	b	91	59	0
Taralga ..	b	86	40	0
Taree	o	95	60	0·03
T'nt'rfield	u	88	61	0·77
Wagga ..	b	70	38	0·05
Walcha ..	g	77	53	0·09
Walgett	b	95	52	0·14
W'ntw'rth	b	71	44	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	71	50	0
Young ..	c	59	39	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky, c. cloudy, d. drizzling rain; f, fog; g, gloomy; h. hazy; m. misty, n. frosty; o. overcast; p. passing showers, r. rain; s, snow; t. thunder, u. threatening. The next column Mx gives the maximum temperature for preceding 24 hours. Mn the corresponding minimum temperature. Rin. the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each station by the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather, a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany, Ea, Eucla; CE, Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong, S, Sydney, N, Newcastle, P M, Port Macquarie; C, Clarence River, B, Brisbane; R, Rockhampton, Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light easterly winds, and smooth sea. Rainfall—Geraldton, 1.15.

South Australia reports weather generally cloudy inland to Burra. Scattered clouds to Port Darwin and W. of C. Borda. Squally and showery on and near coast. Light rains recorded in S.E. and over Mount Lofty Ranges, heaviest, 0.30, at Lucindale. Other stations reporting are—Alice Springs, 0·14; Adelaide, 0.02; Robe, 0.21; M'Donald Bay, 0.01. Prevailing winds S.W. to S., and from 23 to 34 miles per hour in force. Rough sea and rising barometers on coast.

Victoria.—Cloudy generally. Showery on coast, with fresh W. and S.W. winds, rough sea and rising barometers. Squally, with hail and rain at Wilson's Promontory. Cloudy inland, fresh W. wind at Echuca and calm at Omeo. Rainfall—Portland, 0.16; Melbourne, 0.30; C. Otway, 0.22; Wilson's Promontory, 0.34; Lake Entrance, 0.28; Omeo, 0.16.

Tasmania.—Squally weather from W.S.W., with hailstorms at Low'Heads. Rain—0.01; bar. 29·83; temp., 46.

New Zealand.—Russell, bar. 29·90., wind S.W.; Wellington, bar. 29·80, wind N.W.; Bluff, bar. 29·60, wind N. Winds light, fine generally.

New South Wales.—Generally fine, scattered clouds on and near coast, raining on coast at and N. of Lismore; wind generally fresh and cool from S.W., with rising barometers; sea moderate and smooth (rising at Newcastle at 9 a.m.); Kiandra reports "a little snow in night," and Temora strong cold S.E. wind; 0·05 of rain recorded.

Queensland.—Generally fine and clear with N.W. wind and calm, sea moderate. Rainfall: Brisbane, 0.02; Rockhampton, 0·06.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 18, showery, temperature 53.; Cape Otway, W.S.W., 18, showery, temperature 56.; Portland, S.W. 56. showery, moderate sea, temperature 55; Wilson's Promontory, S.W., 54, showery, very high sea, temperature 50·;

New South Wales.—Albury, S.W., cloudy, fine, cool, temperature 60·; Cape St. George, calm, fine, moderate sea, temperature 61·; Deniliquin, S.S.W., fine, temperature 73·; Dubbo, S.W., 2·, fine, temperature 65·; Eden, S.W., 28, fine, slight sea, temperature 65·; Goulburn, W. strong, fine, temperature 63·; Menindie, S., fine, temperature 70·; Moruya, W.S.W., 42, fine, smooth sea, temperature 66·; Newcastle, E.S.E., 13, fine, moderate sea, temperature 61·; Port Macquarie, N.E., 56, fine, smooth sea, temperature 68; Sydney, E., 8, fine, smooth sea, temperature 64·; Wentworth, S.W., fine, temperature 71·; Walgett, S.W., fine, temperature 74·.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 5 inches above summer level; at Hay, 2 feet 7 inches above summer level; at Balranald, 2 feet 2 inches above summer level. Murray: At Albury, 3 feet 2 inches above summer level; at Euston 14 feet 7 inches above summer level. Darling: At Wentworth, 12 feet 3 inches above summer level; at Pooncarie and Menindie, summer level; at Wilcannia and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 11.

Sun rises at 4.52, sets at 6.37; Moon, 9.15 a.m., 10.49 p.m.; Mercury, 5.36 a.m., 7.50 p.m.; Venus, 7.38 a.m., 10.14 p.m., Mars, 1.24 a.m., 12.19 p.m.; Jupiter, 2.33 a.m., 2.31 p.m.; Saturn, 10.9 p.m., 8.5 a.m. New moon, 8th; full moon, 22nd.

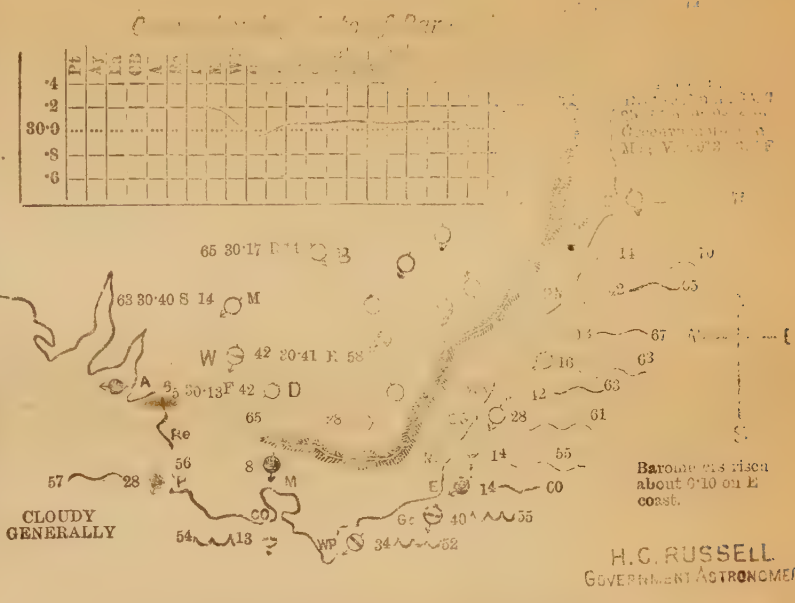
High water at Fort Denison, November 12, 11.26 a.m., 11.45 p.m.

Stations	wt	Mx	Mn	R'in
Albury	c	64	44	0·05
Armidale	b	71	45	0
Balranald	b	73	38	0
Bathurst	b	62	37	0
Bend'm'r	n	71	38	0
Bodalla ..	g	71	40	0·31
Bourke ..	b	75	50	0
C'md'n H.	b	67	45	0
C. St. Geo.	b	73	44	0·25
Carcoar ..	b	62	43	0
Casino ..	b	70	44	0·17
Cassilis ..	b	68	47	0
Clarence	b	77	53	0·12
C'nd'b'lin	b	58	36	0
Cooma ..	g	53	34	0·02
Coonab'n	b	71	46	0
C'nam ble	b	—	—	0
Cowra ..	b	68	62	0
Deniliq'n	c	69	42	0
Dubbo ..	b	70	38	0
Eden	p	65	—	0·07
Euston ..	c	69	44	0
Forbes ..	b	60	40	0
Gl'n Inn's	b	73	41	0
Goulburn	b	78	38	0
Grafton ..	b	67	53	0·30
Gunned'h	b	76	52	0
Hay	b	81	41	0
Hill End	b	—	—	0
Inverell ..	b	72	49	0
Kiandra	c	45	28	0
Lismore	c	73	57	0·36
Maitland	b	85	45	0
Marsdens	b	66	51	0
Menindie	b	67	53	0
Molong' ..	b	71	44	0
Moree ..	b	76	50	0
Moruya ..	g	72	45	0·02
Moss Vale	c	63	40	0
M. Vict'ria	b	63	35	0
Mudgee ..	b	76	41	0
M'rr'mb'h	b	67	47	0
M rr'r'ndi	b	71	51	0
Mus'lbr'k	b	84	41	0
Narrabri	b	89	49	0
Newcastle	b	69	47	0
Nowra ..	c	79	50	0·06
Orange ..	c	80	36	0
Picton ..	c	69	53	0
P. M'q'rie	b	67	46	0
P.St'ph'ns	b	68	46	0
Q'nbeyan	b	63	43	0
Quirindi	b	78	46	0
Singleton	b	79	54	0
SYDNEY ..	b	67	52	0
Tamw'rth	—	—	—	—
Taralga ..	b	71	36	0
Tazes	b	75	47	0
T'ut'rfield	b	74	45	0
Wagga ..	c	70	38	0
Walcha ..	b	68	35	0
Walgett ..	b	73	49	0
W'ntw'rth	c	68	47	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	72	56	0
Young ..	c	74	40	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·6s. E.

Average Annual Rainfall for 26 years.....50·233
Average for 27 years from Jan. 1st to September 31 44·497
Total Rainfall from January 1st to November 12 . 35·677
Barometers corrected to 32° Fah. and Mean Sea [illegible]



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m. standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; [illegible], threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Victoria.—Generally Cloudy. Showery on coast, with light to strong southerly winds, rising barometers, and rough sea. W. wind inland at Echuca, and northerly at Omeo. Rainfall—Melbourne, 0.20; Portland, 0.09; C. Otway, 0.13; Wilson's Promontory, 0.19; Lake Entrance, 0.39; Omeo, 0·07.

Tasmania.—Fine, but cloudy on N. coast, with fresh W. wind.

New Zealand. Russell, bar. 29·80., wind S.W., dull; Wellington, bar. 29·50, wind N.W., 28, showery; Bluff, bar. 29·60, wind S.W., 28; Timaru, bar. 29·40, wind S.W.

New South Wales.—Generally fine and clear, cloudy on coast at and S. of Moruya, showery at Eden; winds generally fresh from S. to N. by W.; barometers rising, smooth and moderate sea, and fresh to strong S.S.W. winds on coast.

Queensland.—Fine and clear on E. coast, with light S.E. winds and calm and moderate sea. Rain: Brisbane, 0·01; Townsville, 0·12.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., cloudy, temperature 62°; Cape St. George, S.S.E., 42, fine, temperature 59°; Clarence River, S.E., 14, fine, smooth sea, temperature 70°; Deniliquin, S.W., 42, cloudy, temperature 68°; Dubbo, S.W., fine, temperature 67°; Eden, S.W., 28, fine, slight sea, temperature 63°; Goulburn, NW., 14, fine, temperature 62°; Moruya, S.E., 42, fine, smooth sea, temperature 60°; Newcastle, S., 28, fine, moderate sea, temperature 63°; Port Macquarie, S., 42, fine, smooth sea, temperature 72; Sydney, S.E., 13, fine, smooth sea, temperature 63°.

Victoria.—Melbourne, S. 13, cloudy, temperature 57°; Portland, S.W. 23, cloudy but fine, smooth sea, temperature 83°; Wilson's Promontory, W., 28, cloudy, squally, moderate sea, temperature 60°; Lake Entrance, S.E., 8, cloudy, smooth sea, temperature 65°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 6 inches above summer level; at Hay, 2 feet 8 inches above summer level; at Balranald, 2 feet 2 inches above summer level. Murray: At [illegible] feet 3 inches above summer level; at Euston 14 feet 6 inches above summer level. Darling: At Wentworth, 12 feet 1 inch above summer level; at Pooncarie, low; at Menindie, low; at Wilcannia, low; at Bourke [illegible].

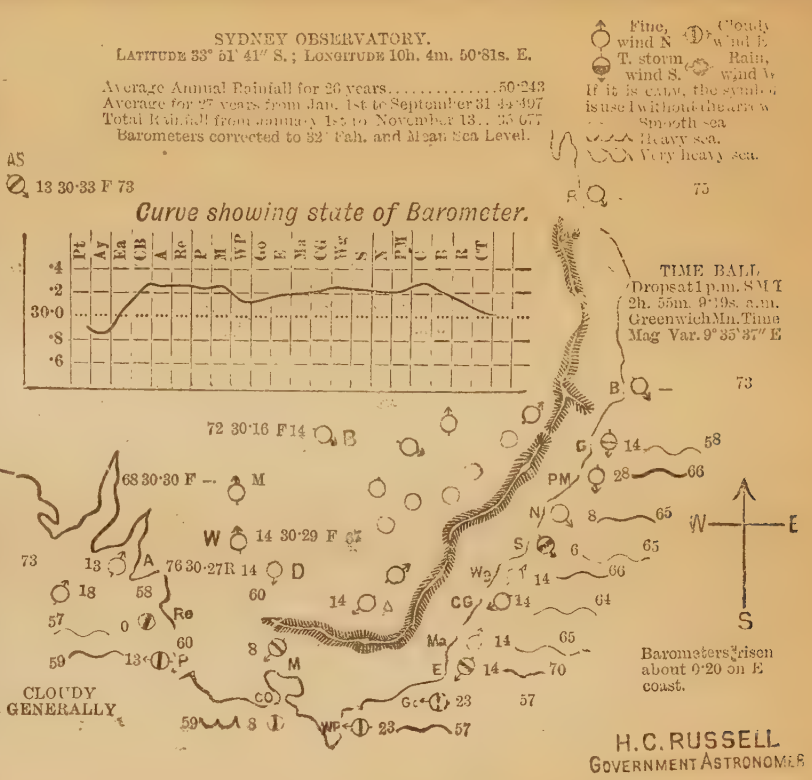
ASTRONOMICAL MEMORANDA FOR NOVEMBER 13.

Sun rises at 4.51, sets at 6.36; Moon, 10.7 a.m., 11.31 p.m.; Mercury, 5.37 a.m., 7.53 p.m. Venus [illegible] a.m., 10.15 p.m., Mars, 1.21 a.m., 12.17 p.m.; Jupiter, 2.29 a.m., 2.23 p.m.; Saturn, 10.5 p.m., 8.1 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 13, [illegible] a.m. [illegible] p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 13, 1885.

Stations	wt	Mx	Mn	R'in
Albury	b	72	45	0
Armidale	b	71	47	0
Balranald	b	79	38	0
Bathurst	b	67	39	0
Bend'm'r	b	77	40	0
Bodalla ..	b	68	41	0
Bourke ..	b	81	54	0
C'md'n H.	b	69	60	0
C. St. Geo.	b	--	52	0
Carcoar ..	b	65	46	0
Casino ..	c	88	58	0
Cassilis ..	b	70	52	0
Clarence	u	81	52	0·10
C'nd'b'lin	b	63	39	0
Cooma ..	b	63	34	0
Coonab'n	b	76	43	0
C'nam ble	b	—	--	0
Cowra ..	b	69	—	0
Deniliq'n	b	74	43	0
Dubbo ..	b	76	48	0
Eden		65	55	0
Euston ..	b	79	42	0
Forbes ..	b	68	49	0
Gl'n Inn's	c	73	43	0
Goulburn	b	70	41	0
Grafton ..	c	83	57	0
Gunned'h	b	81	55	0
Hay	b	71	41	0
Hill End	b	—	—	0
Inverell ..	b	71	45	0
Kiandra	-	—	—	—
Lismore	c	80	59	0
Maitland	g	75	58	0
Marsdens	b	74	54	0
Menindie	b	72	56	0
Molong ..	b	74	43	0
Moree ..	b	80	51	0
Moruya ..	b	67	47	0
Moss Vale	c	64	45	0
M. Vict'ria	c	69	42	0
Mudgee ..	b	78	40	0
M'rr'mb'h	-	—	—	
M[illegible]			—	—
[illegible]rndi	b	73	51	0
Mus'lbr'k	b	90	49	0
Narrabri	b	90	51	0
Newcastle	c	70	59	0
Nowra ..	b	69	51	0
Orange ..	b	62	38	0
Picton ..	c	73	54	0
P. M'q'rie	b	71	56	0
P.St'ph'ns	g	73	57	0
Q'nbeyan	b	68	45	0
Quirindi	b	78	50	0
Singleton	b	80	58	0
Sydney ..	c	70	58	0
Tamw'rth	b	72	39	0
Taralga ..	b	73	40	0
Taree	g	77	59	0
T'nt'rfield	c	76	42	0
Wagga ..	b	74	41	0
Walcha ..	b	67	35	0
Walgett ..	b	77	51	0
W'ntw'rth	b	76	52	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	71	54	0
Young ..	b	66	34	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, calm and light variable winds and smooth sea. No rain.

South Australia reports weather generally fine; scattered clouds N. of Alice Springs and on coast; wind light, and varying from N.E. to N.; smooth sea and falling barometers on coast. No rain.

Victoria.—Generally cloudy; winds light from W. and S.W.; sea moderate (rather rough at Cape Otway); barometers steady. Rainfall—Portland, 0·03; Cape Otway, 0·02; Omeo, 0·01; Echuca, fresh S.W. wind, and fine.

Tasmania.—Fine and clear, with fresh W. wind on N. coast.

New Zealand.—Russell, bar. 29·90., wind calm, fine, winds light; Wellington, bar. 29·80, wind S.E., fine, winds light; Bluff, bar. 29·70, wind W., fine, winds light.

New South Wales.—Generally fine, smooth sea, rising barometers and light S. to N.E. by E. winds, light winds and calms inland. Details in map above.

Queensland.—Generally fine and clear on E. coast, with S.E. winds and calm and moderate sea. Rainfall, Cape Moreton, 0·14.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., cloudy, fine, temperature 68°; Cape St. George, N.N.E., 28, fine, smooth sea, temperature 65°; Clarence River, S.E., 14, fine, smooth sea, temperature 71°; Deniliquin, calm, fine, clear, temperature 72°; Dubbo, N.E., fine, temperature 70°; Goulburn, N.W., fine, temperature 66°; Moruya, N.E., 28, fine, smooth sea, temperature 65°; Newcastle, E., fin., slight sea, temperature 64°; Port Macquarie, S.E., 28, fine, smooth sea, temperature 74; Sydney, E.N.E., 13, fine, clear, smooth sea, temperature 64°; Wentworth, N.W., fine, clear, temperature 72°.

Victoria.—Melbourne, S. 13, fine, temperature 68°; Cape Otway, W., 8, fine, rather rough sea, temperature 67°; Portland, W.S.W., 18, fine, smooth sea, temperature 64°; Wilson's Promontory, W., 23, half-cloudy, gusty, moderate sea, temperature 59°; Lake Entrance, S.S.E., 8, fine, smooth sea, temperature 65°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet 3 inches above summer level; at Hay, 3 feet 3 inches above summer level; at Balranald, 2 feet 2 inches above summer level. Murray: At Albury, 2 feet 11 inches above summer level; at Euston, 14 feet 5 inches above summer level. Darling: At Wentworth, 12 feet above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

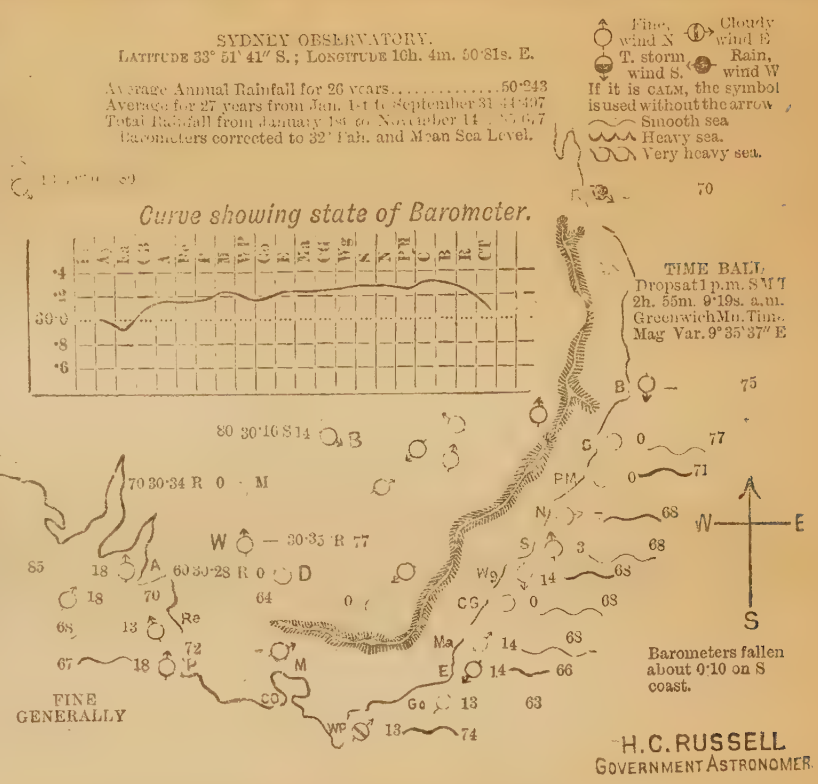
ASTRONOMICAL MEMORANDA FOR NOVEMBER 14.

Sun rises at 4.50, sets at 6.39; Moon, 10.59 a.m., — p.m.; Mercury, 5.39 a.m., 7.57 p.m.; Venus, 7.41 a.m., 10.17 p.m.; Mars, 1.18 a.m., 12.16 p.m.; Jupiter, 2.26 a.m., 2.24 p.m.; Saturn, 10 p.m., 7.56 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 14: 12.25 a.m., 12.46 p.m

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 14, 1885.

Stations	wt	Mx	Mn	r'n
Albury	b	80	48	0
Armidale	--	--	--	—
Balranald	b	95	41	0
Bathurst	b	77	42	0
Bend'm'r	b	79	42	0
Bodalla	b	73	42	0
Bourke	b	88	54	0
C'md'n H.	b	71	51	0
C. St. Geo.	b	70	51	0
Carcoar	b	71	46	0
Casino	b	79	41	0
Cassilis	b	73	53	0
Clarence	c	83	55	0
C'nd'b'lin	b	70	44	0
Cooma	g	76	40	0
Coonab'n	b	82	40	0
C'nam'ble	b	--	--	0
Cowra	b	72	65	0
Deniliq'n	b	85	45	0
Dubbo	b	85	47	0
Eden	b	72	50	0
Euston	b	90	50	0
Forbes	b	83	44	0
Gl'n Inn's	b	71	46	0
Goulburn	b	80	42	0
Grafton	b	84	56	0
Gunned'h	b	85	51	0
Hay	b	82	50	0
Hill End	b	--	--	0
Inverell	b	74	49	0
Kiandra	n	62	31	0
Lismore	c	79	58	0
Maitland	b	73	50	0
Marsdens	b	81	58	0
Menindie	b	81	52	0
Molong	b	83	48	0
Moree	b	84	60	0
Moruya	c	70	50	0
Moss Vale	b	72	44	0
M. Vict'ria	b	73	48	0
Mudgee	b	84	42	0
M'rr'mb'h	b	85	46	0
M rr'r'ndi	b	75	51	0
Mus'lbr'k	b	86	47	0
Narrabri	b	93	55	0
Newcastle	b	71	55	0
Nowra	-	—	—	--
Orange	b	69	40	0
Picton	b	77	45	0
P. M'q'rie	b	72	61	0
P. S'ph'ns	b	77	48	0
Q'nbeyan	b	70	51	0
Quirindi	b	81	51	0
Singleton	b	78	58	0
SYDNEY	b	70	55	0
Tamw'rth	b	82	50	0
Taralga	b	81	40	0
Taree	b	80	48	0
T'nt'rfield	b	79	51	0
Wagga	b	85	50	0
Walcha	b	72	36	0
Walgett	b	85	56	0
W'ntw'rth	b	87	55	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	74	50	0
Young	b	87	45	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy on S. coast with fresh S.W. wind and moderate sea. No rain.

South Australia.—Reports weather generally fine and clear with fresh northerly winds. Smooth sea and falling barometers on coast. Hot N.N.W. wind at Eucla. No rain.

Victoria.—Generally fine and clear; light N.E. winds, steady barometers, and smooth sea on coast. Fresh N.W. wind inland at Echuca, and calm at Omeo. No rain.

Tasmania.—Fine on N. coast with fresh W. wind.

New Zealand.—Russell, bar. 30·00., wind SW., fine generally, winds light; Wellington, bar. 29·70, wind N.W., fine generally, winds light; Bluff, bar. 29·60, wind W., fine generally, winds light.

New South Wales.—Fine and clear throughout, with light variable winds and calms, smooth sea and steady barometers on coast. Details in map above.

Queensland.—S.E. winds and moderate sea generally, light clouds N. of Townsville, light rain falling at Rockhampton, fine and clear at Brisbane. Rainfall: Cooktown, 0·02; Rockhampton, 0·11.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, clear, warm, temperature 72°; Cape St. George, E.N.E., 28, fine, smooth sea, temperature 70°; Clarence River, N.E., 10, fine, smooth sea, temperature 72°; Deniliquin, calm, fine, temperature 75°; Dubbo, W., 14, fine, temperature 75°; Eden, N.E., 14, fine, smooth sea, temperature 66°; Forbes, N.E., fine, temperature 88°; Goulburn, calm, fine, temperature 68°; Menindie, calm, fine, hot, temperature 77°; Moruya, N.E., 28, fine, temperature 71°; Newcastle, N.E., 20, fine, smooth sea, temperature 68°; Port Macquarie, N.E., 28, hazy, smooth sea, temperature 76; Sydney, N.E., 15, fine, smooth sea, temperature 69°; Wentworth, N., 14, clear, temperature 78°.

Victoria.—Portland, W., 30, fine, smooth sea, temperature 61°; Wilson's Promontory, W.S.W., 12, cloudy, smooth sea, temperature 71°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 feet above summer level; at Hay, 2 feet 9 inches above summer level; at Balranald, 2 feet 2 inches above summer level. Murray: At Albury, 3 feet 9 inches above summer level; at Euston, 14 feet 4 inches above summer level. Darling: At Wentworth, 11 feet 11 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

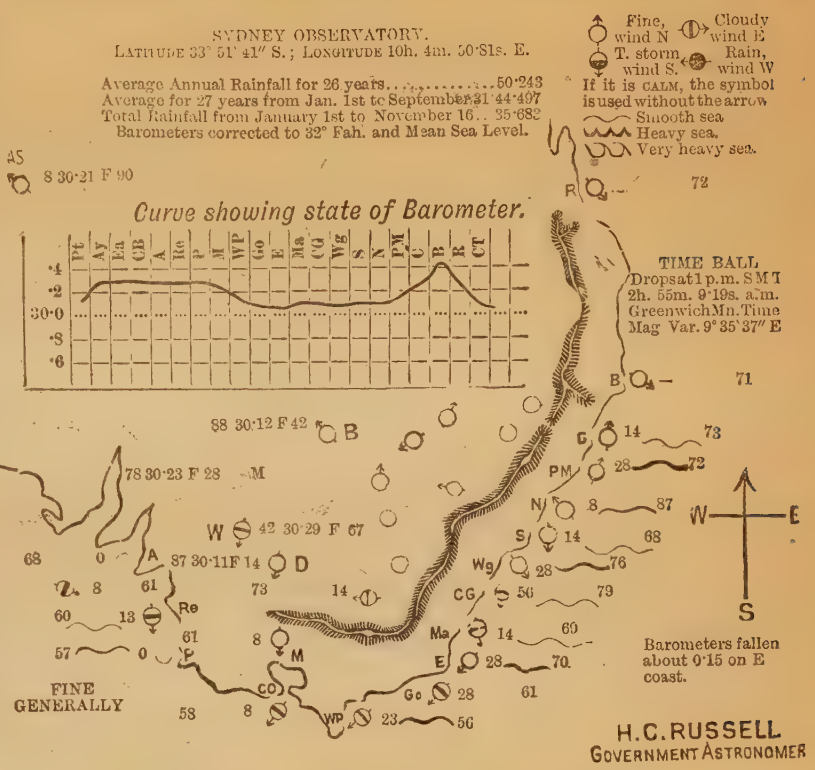
ASTRONOMICAL MEMORANDA FOR NOVEMBER 16.

Sun rises at 4.49, sets at 6.41; Moon, 12.46 p.m., 12.54 a.m.; Mercury, 5.42 a.m., 8.3 p.m.; Venus, 7.43 a.m., 10.19 p.m.; Mars, 1.13 a.m., 12.12 p.m.; Jupiter, 2.20 a.m., 2.18 p.m.; Saturn, 9.52 p.m., 7.48 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 1.58 a.m., 2.29 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 16, 1885.

Stations	wt	Mx	Mn	R'in
Albury	g	95	50	0
Armidale	b	82	50	0
Balranald	b	105	50	0
Bathurst	b	90	44	0
Bend'm'r	b	86	45	0
Bodalla ..	b	88	51	0
Bourke ..	b	105	71	0
C'md'n H.	–	—	—	—
C. St. Geo.	c	69	63	0
Carcoar ..	b	80	52	0
Casino ..	b	88	48	0
Cassilis ..	b	85	61	0
Clarence	b	85	55	0
C'nd'b'lin	b	82	46	0
Cooma ..	c	87	50	0
Coonab'n	b	94	47	0
C'nam ble	b	—	—	0
Cowra ..	b	78	68	0
Deniliq'n	b	100	55	0
Dubbo ..	b	95	52	0
Eden	b	78	63	0
Euston ..	c	102	58	0
Forbes ..	b	91	51	0
Gl'n Inn's	b	85	45	0
Goulburn	b	90	46	0
Grafton ..	b	84	55	0
Gunned'h	b	96	61	0
Hay	b	88	51	0
Hill End	b	—	—	0
Inverell ..	b	81	51	0
Kiandra	n	77	28	0
Lismore	b	88	55	0
Maitland	b	94	54	0
Marsdens	b	94	68	0
Menindie	b	95	69	0
Molong ..	b	92	42	0
Moree ..	b	93	63	0
Moruya ..	c	78	57	0
Moss Vale	c	83	57	0
M. Vict'ria	b	91	49	0
Mudgee ..	b	94	47	0
M'rr'mb'h	b	91	57	0
M rr'r'ndi	b	85	57	0
Mus'lbr'k	b	103	59	0
Narrabri	b	98	61	0
Newcastle	b	90	62	0
Nowra ..	c	98	63	0
Orange ..	b	95	48	0
Picton ..	b	93	52	0
P. M'q'rie	b	78	65	0
P.St'ph'ns	b	81	56	0
Q'nbeyan	b	84	53	0
Quirindi	b	91	55	0
Singleton	b	88	60	0
SYDNEY ..	b	83	61	0·01
Tamw'rth	b	90	54	0
Taralga ..	u	90	44	0
Taree	–	—	—	—
T'nt'rfield	b	83	43	0
Wagga ..	b	99	45	0
Walcha ..	–	—	—	—
Walgett ..	b	98	62	0
W'ntw'rth	c	102	61	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	80	58	0
Young ..	b	95	53	0



H. C. RUSSELL
GOVERNMENT ASTRONOMER

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Western Australia.—Generally fine and clear, with light easterly winds and moderate sea; no rain.

South Australia reports weather generally fine, with scattered clouds and light south-east to south wind; smooth sea and rising barometers on coast. Rainfall—Port Darwin, 0·68; Daly Waters, 0·32; Streaky Bay, 0·01; and M'Donnell Bay, 0·01.

Victoria.—Generally fine and clear, scattered clouds and slight sea on coast; prevailing winds, S.W. and S.; velocity from calm to 23 miles per hour; fresh S.W. wind at Echuca, calm at Omeo. Rainfall—Portland, 0·12; Cape Otway, 0·03. Barometers rising.

Tasmania.—Fine and clear on N. coast, with fresh W. wind.

New Zealand.—Russell, bar. 30·20., wind SW., fine, light; Wellington, bar. 30·00, wind N.W., fine, light; Bluff, bar. 29·70, wind N.W., 28 miles per hour.

New South Wales.—Fine and clear, throughout, with light variable winds and calms, and falling barometers; smooth sea on coast; no rain. Details in map above.

Queensland.—Fine and clear on E. coast, with light S.E. wind and moderate sea; sea rather rough at Townsville. Rainfall: Cooktown, 0·08.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 13, fine, temperature 63°; Cape Otway, S.W., 8, fine, misty, moderate sea, temperature 59°; Portland, S.S.W., 23, fine, smooth sea, temperature 62°; Wilson's Promontory, W.S.W., 23, fine, squally, slight sea, temperature 59°; Lake Entrance, S.E., 23, fine, but cloudy, smooth sea, temperature 64°.

New South Wales.—Albury, calm, fine, hot, temperature 80°; Cape St. George, S.E., 42, dull, smooth sea, temperature 6[illegible]°; Clarence River, N.E., fine, smooth sea, temperature 75°; Deniliquin, S.W., fine, temperature 82°; Dubbo, W., fine, temperature 83°; Eden, S., 14, fine, smooth sea, temperature 72°; Goulburn, N.W., strong, fine, temperature 76°; Menindie, W., 14, fine, temperature 95°; Moruya, S.E., 42, cloudy, moderate sea, temperature 72°; Newcastle, N.E., 13, fine, no sea, temperature 78°; Sydney, S., 13, dull, smooth sea, temperature 70°; Wentworth, W., 14, fine, temperature 78°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 11 inches above summer level; at Hay, 2 feet 1 inch above summer level; at Balranald, 2 feet above summer level. Murray: At Albury, 3 feet 8 inches above summer level; at Euston, 14 feet 3 inches above summer level. Darling: At Wentworth, 11 feet 7 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

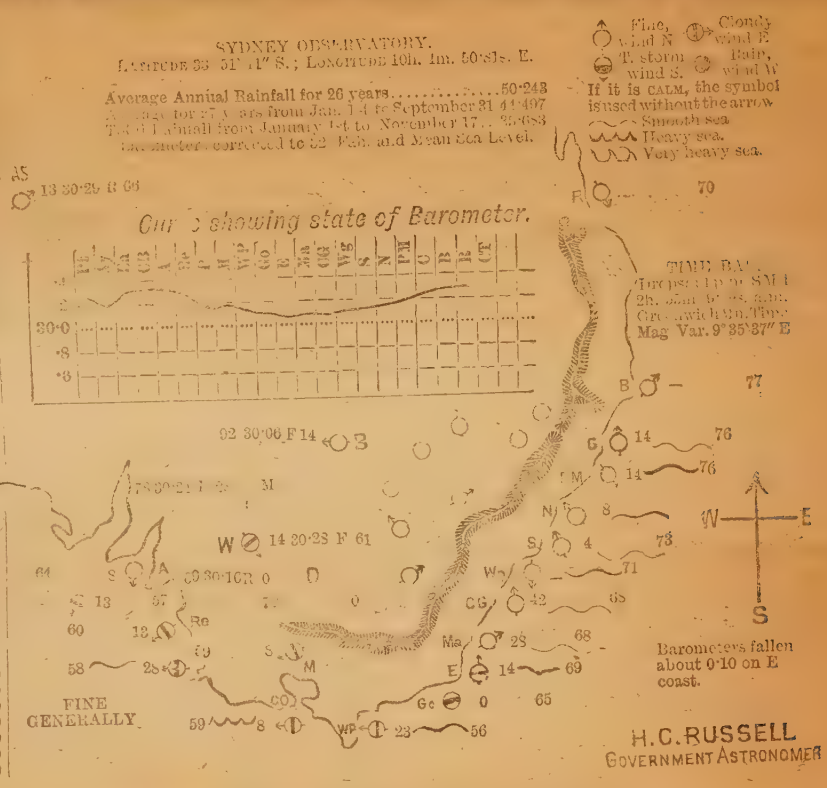
ASTRONOMICAL MEMORANDA FOR NOVEMBER 17.

Sun rises at 4.49, sets at 6.42; Moon, 1.42 p.m., 1.20 a.m.; Mercury, 5.43 a.m., 8.6 p.m.; Venus, 7.44 a.m., 10.20 p.m.; Mars, 1.10 a.m., 12.10 p.m.; Jupiter, 2.17 a.m., 2.15 p.m.; Saturn, 9.48 p.m., 7.44 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 2.59 a.m., 3.32 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 17, 1888.

Stations	wt	Mx.a.m	R'in
Albany	b	93 55	0
Armidale	b	82 53	0
Balranald	b	101 50	0
Bathurst	b	93 55	0
Bend'm'r	b	89 50	0
Bedalla	b	73 53	0
Bourke	b	109 73	0
C'nd'n H.	b	79 64	0
C. St. Geo.	b	68 57	0
Carcoar	b	82 71	0
Casino	b	96 51	0
Cassilis	b	90 66	0
Clarence	b	82 59	0
C'nd'b'lin	c	81 55	0
Cooma	b	91 46	0
Coonab'n	b	96 51	0
C'nam'ble	b	-- --	0
Cowra	b	82 75	0
Deniliq'n	b	94 50	0
Dubbo	b	101 58	0
Eden	c	78 58	0
Euston	b	97 55	0
Forbes	b	101 64	0
Gl'n Inn's	b	93 52	0
Goulburn	b	91 53	0
Grafton	b	95 58	0
Gunned'h	b	99 65	0
Hay	b	98 53	0
Hill End	b	-- --	0
Inverell	b	85 55	0
Kiandra	b	78 51	0
Lismore	b	90 59	0
Maitland	b	101 60	0
Marsdens	b	98 75	0
Menindie	c	96 72	0
Molong	b	96 59	0
Moree	b	96 67	0
Moruya	b	73 57	0
Moss Vale	b	79 55	0
M. Vict'ria	b	90 51	0
Mudgee	b	98 46	0
M'rr'mb'h	b	91 69	0
M rr'r'ndi	b	91 66	0
Mus'lbr'k	b	111 60	0
Narrabri	c	99 63	0
Newcastle	b	97 61	0
Nowra	b	78 58	0
Orange	b	85 53	0
Picton	b	96 58	0
P. M'q'rie	b	78 55	0
P.St'ph'ns	b	82 61	0
Q'nbeyan	b	89 59	0
Quirindi	b	97 62	0
Singleton	b	89 66	0
SYDNEY	b	84 61	0
Tamw'rth	b	95 58	0
Taralga	b	89 54	0
Taree	b	94 62	0
Tnt'rfield	b	91 50	0
Wagga	b	98 66	0
Walcha	b	85 42	0
Walgett	b	102 70	0
W'ntw'rth	u	91 54	0
Wilcannia	b	-- --	0
W'll'ng'ng	b	80 58	0
Young	b	100 64	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; r, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours, M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with light N.E. and E. winds and smooth sea. No rain.

South Australia reports weather generally fine with scattered clouds. Dull and gloomy north of Katherine, also in places on coast and between Port Augusta and Terouri. Prevailing winds S.W. to S.E., and light smooth sea and steady barometers on coast. Rainfall: Port Darwin, 0·56.

Victoria.—Generally cloudy on coast and squally from W. to S. Fine falling barometers and slight sea. Rough at Cape 6. No rain. inland, light S.W. wind at Echuca, and calm at W. wind.

Tasmania.—Dull on N. coast, with fresh wind SW., light, fine; New Zealand.—Russell, bar. 32., light, fine; Bluff, bar. Wellington, bar. 30·00, [illegible] fine and clear, throughout, with light 29·90, wind W., light [illegible] and calms, and falling barometers; smooth sea on New South [illegible] variable rain. Details in map above.

Queensland.—Generally fine, with N.E. and S.E. winds and moderate sea; rough sea and gloomy weather at Townsville.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., dusty, hot, temperature 78°; Cape St. George, N., 42, like storm, temperature 70°; Deniliquin, calm, fine, temperature 84°; Dubbo, W., fine, temperature 85°; Eden, S.W., 14, fine, smooth sea, temperature 65°; Goulburn, W., strong, hot, temperature 79°; Menindie, S.W., 28, fine, hot, temperature 84°; Moruya, S.E., 28, cloudy, smooth sea, temperature 69°; Newcastle, N.E., 42, hazy, cloudy, smooth sea, temperature 74°; Port Macquarie, N.E., 8, cloudy, smooth sea, temperature [illegible] Worth, W., 14, fine, temperature 78°; Walgett, calm, 71°; hot, temperature 100°;

Victoria.—Melbourne, W.S.W., 18, fine, barometers falling, temperature 68°; Portland, W., 42, threatening rain, smooth sea, temperature 62°; Wilson's Promontory, W., 18, strong squalls, temperature 59°; Lake Entrance, E., 6, fine, smooth sea, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 9 inches above summer level; at Hay, 2 feet 1 inch above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, 3 feet 1 inches above summer level; at Euston, 14 feet 1 inch above summer level. Darling: At Wentworth, 11 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 18.

Sun rises at 4.48, sets at 6.43; Moon, 2.39 p.m., 1.54 a.m.; Mercury, 5.45 a.m., 8.9 p.m.; Venus, 7.45 a.m., 10.21 p.m.; Mars, 1.8 a.m., 12.9 p.m.; Jupiter, 2.14 a.m., 2.12 p.m.; Saturn, 9.14 p.m., 7.40 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 4.5 a.m., 4.39 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 18, 1889.

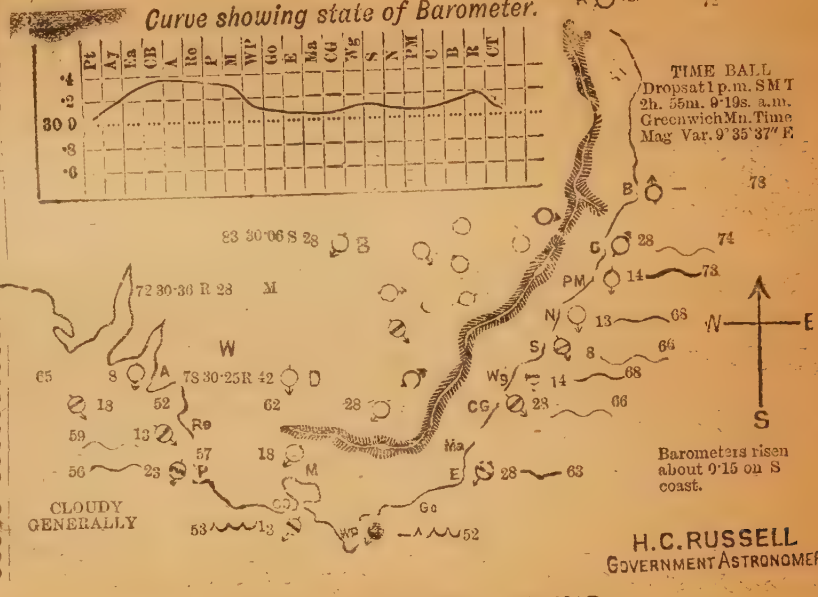
Stations	wt	Mx	m	R'in
Albury	b	87	55	0
Armidale	b	91	51	0
Balranald	b	90	44	0
Bathurst	b	90	60	0
Bend'm'r	b	91	53	0
Bodalla ..	–	—	—	--
Bourke ..	b	112	74	0
C'md'n H.	b	79	66	0
C. St. Geo.	c	73	59	0
Carcoar ..	b	84	66	0
Casino ..	c	97	66	0
Cassilis ..	b	93	71	0
Clarence	b	82	60	0
C'nd'b'lin	c	75	54	0
Cooma ..	c	86	46	0
Coonab'n	c	100	58	0
C'nam ble	b	--	--	0
Cowra ..	b	86	79	0
Deniliq'n	b	86	48	0
Dubbo ..	c	101	61	0
Eden	u	71	58	0
Euston ..	b	84	49	0
Forbes ..	b	95	65	0
Gl'n Inn's	b	95	56	0
Goulburn	b	90	56	0
Grafton ..	b	95	63	0
Gunned'h	b	101	—	0
Hay	b	88	51	0
Hill End	g	—	—	0
Inverell ..	b	78	59	0
Kiandra	b	77	41	0
Lismore	c	91	41	0
Maitland	b	100	70	0
Marsdens	b	95	70	0
Menindie	b	84	62	0
Molong ..	b	97	66	0
Moree ..	c	97	68	0
Moruya ..	–	—	—	—
Moss Vale		81	56	0
M. Vict'ria	g	85	59	0
Mudgee ..	c	95	54	0
M'rr'mb'h	c	93	65	0
M rr'r'ndi	b	91	73	0
Mus'lbr'k	b	104	67	0
Narrabri	g	102	71	0
Newcastle	c	84	64	0
Nowra ..	c	97	61	—
Orange ..	c	86	56	0
Picton ..	o	90	63	0
P. M'q'rie	c	81	61	0
P.St'ph'ns	c	83	65	0·03
Q'nbeyan	b	87	57	0
Quirindi	b	96	64	0
Singleton	b	97	71	0
SYDNEY ..	g	76	64	0
Tamw'rth	b	98	61	0
Taralga ..	b	88	49	0
Taree	c	92	66	0
T'nt'rfield	c	96	56	0
Wagga ..	b	94	56	0
Walcha ..	c	87	52	0
Walgett ..	b	107	73	0
W'ntw'rth	–	—	—	—
Wilcannia	b	—	—	0
W'll'ng'ng	c	90	63	0
Young ..	g	99	61	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·243
Average for 27 years from Jan. 1st to September 31 44·497
Total Rainfall from January 1st to November 18 .. 35·683
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, but cloudy, with light easterly winds and smooth sea. No rain.

South Australia reports weather generally fine, with scattered clouds. Dull on parts of coast. Prevailing winds, S. to E., and from 23 to 34 miles per hour. Rising barometers and smooth sea on coast. No rain.

Victoria.—Fine but cloudy on coast, with fresh S.W. winds, rising barometers, and rough sea. Showery at Wilson's Promontory. Rainfall: Portland, 0·01; Cape Otway, 0·03; Wilson's Promontory, 0·09. Fine inland at Echuca, with fresh S.W. wind. E. wind and sky half clouded at Omeo.

Tasmania.—Fine but cloudy on N. coast, with fresh W.S.W. breeze.

New Zealand.—Russell, bar. 30·20, wind calm, weather gloomy; Wellington, bar. 30·00, wind N.W., light; Bluff, bar. 29·50, wind N., weather fine. Showery on W. coast.

New South Wales.—Generally fine; cloudy in S.W. and S. See map above. Smooth sea, rising barometers, and light to fresh southerly winds on coast; light E. to W. by S. winds and calms inland.

Queensland.—Generally fine and clear, with light variable winds and moderate sea. Rainfall: Cooktown, 1.75. Rough sea at Townsville.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, N.S.W., fine, temperature 72°; Cape St. George, S.E., 28, dull, moderate sea, temperature 69°; Eden, S.W., 28, fine, slight sea, temperature 68°; Goulburn, W., fine, temperature 74°; Moruya, S.S.E., 28, dull, moderate sea, temperature 62°; Newcastle, S., fine, smooth sea, temperature 66°; Port Macquarie, S., 42, hazy, smooth sea, temperature 76°; Sydney, S.E., 13, cloudy, smooth sea, temperature 65°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 7 inches above summer level; at Hay, 2 feet above summer level; at Balranald, 3 feet 6 inches above summer level. Murray: At Albury, 3 feet above summer level; at Euston, 14 feet above summer level. Darling: At Pooncarie, Menindie, Wilcannia, and Bourke, low.

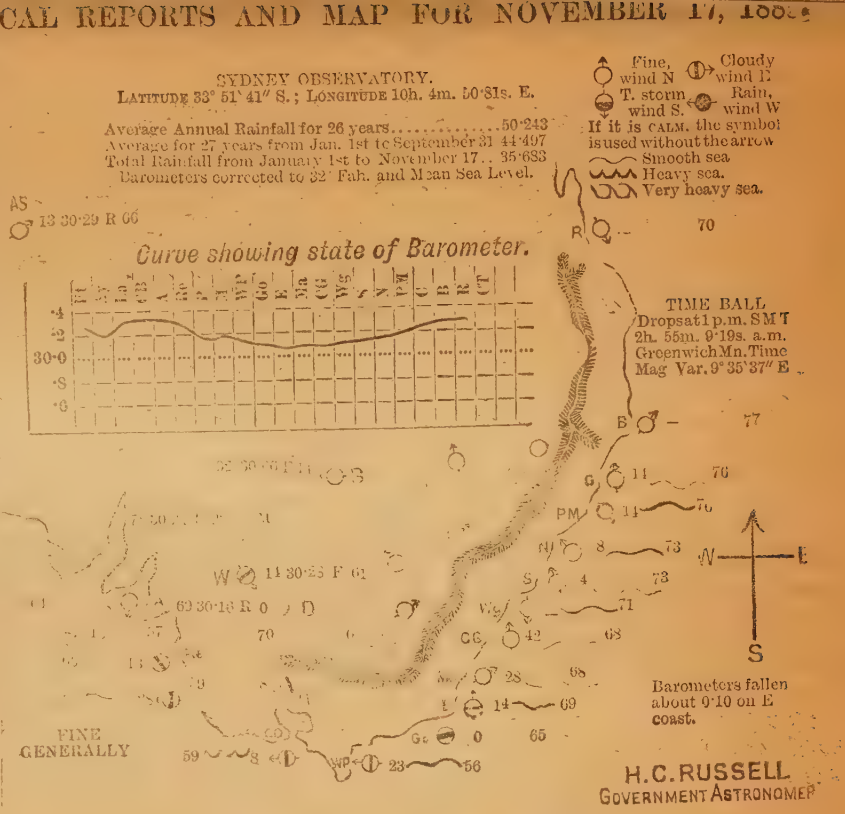
ASTRONOMICAL MEMORANDA FOR NOVEMBER 19.

Sun rises at 4.48, sets at 6.44; Moon, 3.37 p.m., 2.29 a.m.; Mercury, 5.46 a.m., 8.12 p.m.; Venus, 7.46 a.m., 10.22 p.m.; Mars, 1.5 a.m., 12.7 p.m.; Jupiter, 2.8 a.m., 2.8 p.m.; Saturn, 9.40 p.m., 7.36 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, November 18: 5.12 a.m., 5.43 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 17, 1882.

Stations.	W.T.	M'X	M'n	R'in
Albury	b	93	55	0
Armidale	b	82	53	0
Balranald	b	101	50	0
Bathurst	b	93	55	0
Bend'n'r	b	89	50	0
Bodalla ..	b	73	53	0
Bourke ..	b	109	78	0
C'md'n H.	b	79	64	0
C. St. Geo.	b	68	57	0
Carcoar ..	b	82	71	0
Casino ..	b	96	51	0
Cassilis ..	b	90	66	0
Clarence	b	82	50	0
C'nd'b'lin	c	83	55	0
Cooma ..	b	91	46	0
Coonab'n	b	96	51	0
C'namble	b	--	--	0
Cowra ..	b	82	75	0
Deniliq'n	b	94	50	0
Dubbo ..	b	101	58	0
Eden	c	78	58	0
Euston ..	b	97	55	0
Forbes ..	b	101	64	0
Gl'n Inn's	b	93	52	0
Goulburn	b	91	53	0
Grafton ..	b	95	58	0
Gunn[illegible]	b	[illegible]	[illegible]	0
Hay	b	95	73	0
Hill End	b	--	--	0
Inverell ..	b	85	55	0
Kiandra	b	7[illegible]	[illegible]	0
Kismore	b	96	[illegible]	0
Maitland	b	1[illegible]	[illegible]	0
Marsdens	b	95	75	0
Menindie	c	96	72	0
Molong ..	b	96	9	0
Moree ..	b	96	7	0
Moruya ..	b	73	57	0
Moss Vale	b	79	55	0
M. Vict'ria	b	90	51	0
Mudgee ..	b	98	46	0
M'rr'mb'h	b	91	69	0
M rr'r'ndi	b	91	66	0
Mus'lbr'k	b	111	60	0
Narrabri	c	99	63	0
Newcastle	b	97	61	0
Nowra ..	b	78	58	0
Orange ..	b	85	53	0
Picton ..	b	96	58	0
P. M'q'rie	b	78	55	0
P.St'ph'ns	b	82	61	0
Q'nbeyan	b	89	59	0
Quirindi	b	97	62	0
Singleton	b	89	66	0
SYDNEY ..	b	84	61	0
Tamw'rth	b	95	58	0
Taralga ..	b	89	54	0
Taree	b	94	62	0
T'nt'rfield	b	91	60	0
Wagga ..	b	98	66	0
Walcha ..	b	85	42	0
Walgett ..	b	102	70	0
W[illegible]	[illegible]	91	54	0
Wilcannia	b	—	—	0
W'll'ng	b	80	58	0
Young ..	b	100	64	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquerie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, terminating with Western Australia, and passing along eastwards; northerly winds preceding them; and southerly following.

Western Australia.—Generally fine, with light N.E. and E. winds and smooth sea. No rain.

South Australia reports weather generally fine with scattered clouds. Dull and gloomy north of Katherine, also in places on coast and between Port Augusta and Terouri. Prevailing winds S.W. to S.E., and light smooth sea and steady barometers on coast. Rainfall: Port Darwin, 0·56.

Victoria.—Generally cloudy on coast and squally from W., with falling barometers and slight sea. Rough at Cape Otway. Fine inland, light S.W. wind at Echuca, and calm at Omeo. No rain.

Tasmania.—Dull on N. coast, with fresh W.N.W. wind.

New Zealand.—Russell, bar. 30·20., wind SW., light, fine; Wellington, bar. 30·00, wind S.E., light, fine; Bluff, bar. 29·90, wind W., light, fine.

New South Wales.—Fine and clear throughout, with light variable winds and calms, and falling barometers: smooth sea on coast: [illegible]. Details in map above.

Queensland.—Generally fine, with N.E. and S.E. winds and moderate sea; rough sea and gloomy weather at Townsville.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., dusty, hot, temperature 78°; Cape S[illegible], N., 42, like storm, temperature 76°; Deniliquin, calm, fine, temperature [illegible]; Dubbo, W., fine, temperature 85°; Eden, S.W., 14, fine, smooth sea, temperature 65°; Goulburn, W., strong [illegible], temperature 72°; Menindie, S.W., 28, fine, hot, temperature 84°; Moruya, S.S.E., 28, cloudy, smooth sea, temperature 69°; Newcastle, N.E., 8, fine, smooth sea, temperature 74°; Port Macquarie, N.N.E., 42, hazy, cloudy, smooth sea, temperature 79°; Sydney, E., 8, cloudy, smooth sea, temperature 71°; Wentworth, W., 14, fine, temperature 78°; Walgett, calm, fine, hot, temperature 100°;

Victoria.—Melbourne, W.S.W., 18, fine, barometer falling, temperature 68°; Portland, W., 42, threatening rain, smooth sea, temperature 62°; Wilson's Promontory, W., 48, strong squall, temperature 59°; Lake Entrance, E., 6, fine, smooth sea, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 9 inches above summer level; at Hay, 2 feet 1 inch above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, [illegible] feet 4 inches above summer level; at Euston, 14 feet 1 inch above summer level. Darling: At Wentworth, 11 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER [illegible].

Sun rises at 4.48, sets at 6.43; Moon, 2.39 p.m., 1.54 a.m.; Mercury, 5.45 a.m., 8.9 p.m.; Venus, 7.1[illegible]; Mars, 1.8 a.m., 12.9 p.m.; Jupiter, 2.14 a.m., [illegible]; 9.44 p.m., 7.40 a.m. New moon, 8th; full moon, 22nd.

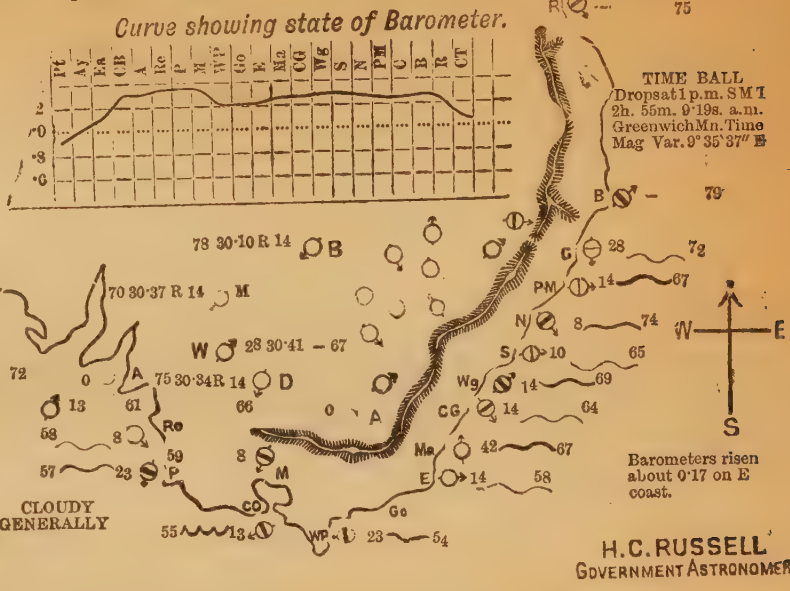
High water at Fort Denison: 4.5 a.m., 4.2[illegible] p.m.

RTS AND MAP FOR NOVEMBER 19, 1886

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

erage Annual Rainfall for 26 years.....50·243
verage for 27 years from Jan. 1st to September 31 44·497
otal Rainfall from January 1st to November 19.. 35·633
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.

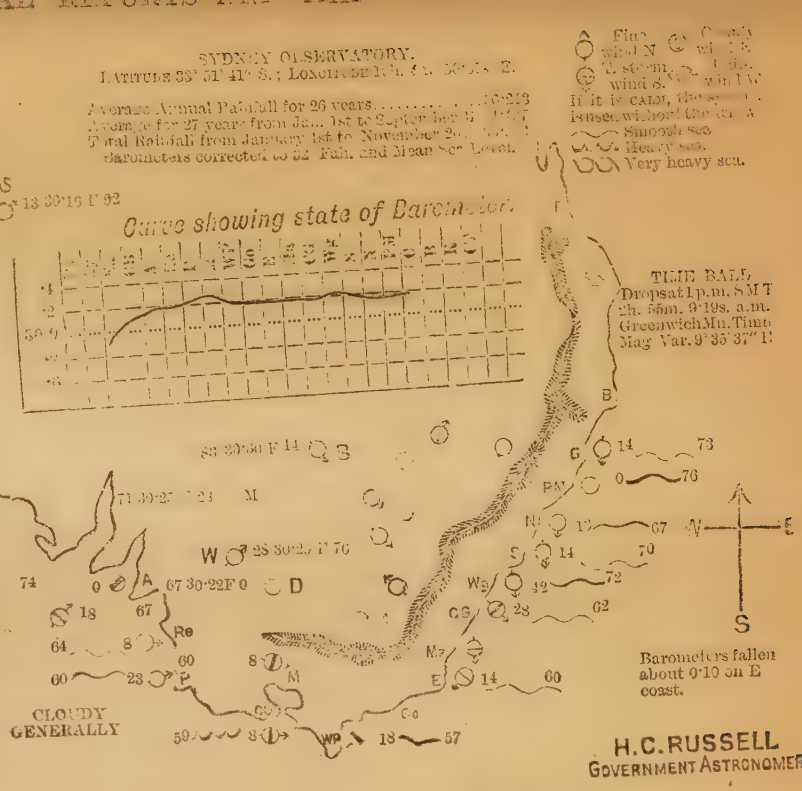


H. C. RUSSELL
GOVERNMENT ASTRONOMER

				0·05
				0
				0
				0
				0
				0·08
				0
				0·03
				0
				0
				0
				0
				0

METEOROLOGICAL REPORTS FOR

Stations	W.T.	Mx	Mn	R
Albury	b	85	[illegible]	[illegible]
Armidale	b	79	55	[illegible]
Balranald	b	98	48	0
Bathurst	b	83	45	0
Bend'm'r	b	82	49·0	0·1
Bodalla ..	g	74	51	0
Bourke ..	b	102	67	0
C'md'n H.	c	73	60	0
C. St. Geo.	u	67	55	0
Carcoar ..	b	67	56	0
Casino ..	b	82	58	0·43
Cassilis ..	b	—	61	0
Clarence	b	79	61	0·52
C'nd'b'lin	b	74	43	0
Cooma ..	c	81	42	0
Coonab'n	b	95	49	0
C'nam'ble	b	—	—	0
Cowra ..	b	81	—	0
Deniliq'n	b	88	41	0
Dubbo ..	b	94	57	0
Eden	c	68	52	0
Euston ..	b	90	59	0
Forbes ..	c	82	54	0
Gl'n Inn's	p	85	51	0·10
Goulburn	b	82	51	0
Grafton ..	c	80	50	0·20
Gunned'h	—	—	—	—
H[illegible]	b	86	51	0
Hill End	b	—	—	0
Inverell ..	b	89	57	0·58
Kiandra	c	70	40	0
Lismore	u	84	61	0·50
Maitland	b	81	55	[illegible]
Marsdens	b	97	63	0
Menindie	b	86	60	0
Molong ..	b	88	53	0
Moree ..	b	92	62	0·36
Moruya ..	g	72	56	0
Moss Vale	—	—	—	—
M. Vict'ria	b	78	48	0
Mudgee ..	b	89	50	0
M'rr'mb'h	b	87	55	0
M rr'ndi	b	82	56	0
Mus'lbr'k	u	85	52	0
Narrabri	b	100	63	0
Newcastle	b	73	59	0
Nowra ..	—	—	—	—
Orange ..	b	78	45	0
Picton ..	b	73	55	0
P. M'q'rie	b	77	57	0
P.St'ph'ns	b	79	54	0
Q'nbeyan	b	74	55	0
Quirindi	b	89	61	0
Singleton	b	77	59	0
SYDNEY ..	b	71	58	0
Tamw'rth	b	90	56	0
Taralga ..	b	89	56	0
Taree	b	75	56	0
T'nt'rfield	b	84	56	1·27
Wagga ..	b	90	48	0
Walcha ..	b	70	53	0·02
Walgett ..	b	97	65	0
W'ntw'rth	c	86	60	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	75	56	0
Young ..	b	89	49	0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Esperance Bay: Cloudy, gloomy, and misty, with light S.E. wind and moderate sea.

South Australia.—Generally dull inland to Carrieton; scattered clouds to Port Darwin; fine in S.E. Prevailing winds N.E. to N., and from 13 to 23 miles per hour. Rainfall: Port Darwin, 0·45.

Victoria.—Cloudy on coast, with light easterly winds, smooth sea, and falling barometers; fine inland; fresh S. wind at Echuca, and calm at Omeo; no rain.

New Zealand.—Russell, bar. 30·10, wind calm, fine; Wellington, bar. 29·70, wind N.W., 34 miles; Bluff, bar. 29·40, wind N.W., dull. Passing showers and squally on west coast.

New South Wales.—Generally fine and clear; scattered clouds in places on coast S. of Cape St. George; sea smooth, with light southerly winds and falling barometers; light variable winds and calm inland.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, temperature 76°; Cape St. George, S.E., 14, dull, smooth sea, temperature 67°; Dubbo, W., 8, fine, temperature 81°; Eden, E., 28, fine, smooth sea, temperature 60°; Goulburn, E., fine, temperature 71°; Menindie, calm, fine, temperature 80°; Moruya, E., 28, cloudy, smooth sea, temperature 64°; Newcastle, S.E., fine, smooth sea, temperature 69°; Port Macquarie, E., 28, fine, smooth sea, temperature 79°. Sydney, S.E., 13, scattered clouds, smooth sea, temperature 68°. Wentworth, N., fine, temperature 73°.

Victoria.—Melbourne, S., 13, fine, temperature 65°; Cape Otway, E., 13, fine but cloudy, moderate sea, temperature 61°; Portland, E.S.E., 23, fine but cloudy, smooth sea, temperature 62°; Wilson's Promontory, S.S.W., 13, fine but cloudy, slight sea, temperature 67°; Lake Entrance, E., 8, fine, smooth sea, temperature 64°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 6 inches above summer level; at Hay, 1 foot 6 inches above summer level; at Balranald, 3 feet 3 inches above summer level. Murray: At Albury, 2 feet 4 inches above summer level; at Euston, 13 feet 9 inches above summer level. Darling: At Wentworth, 10 feet 10 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 21.

Sun rises at 4.47, sets at 6.46; Moon, 5.42 p.m., 3.45 a.m.; Mercury, 5.49 a.m., 8.19 p.m.; Venus, 7.19 a.m., 10.23 p.m.; Mars, 1.0 a.m., 12.4 p.m.; Jupiter, 2.1 a.m., 2.1 p.m.; Saturn, 9.31 p.m., 7.27 a.m. New moon, 8th; full moon, 22nd.

High water at Port Denison, November 21: 7.6 a.m., 7.30 p.m.

METEOROLOGICAL REPORTS AND MAP FOR

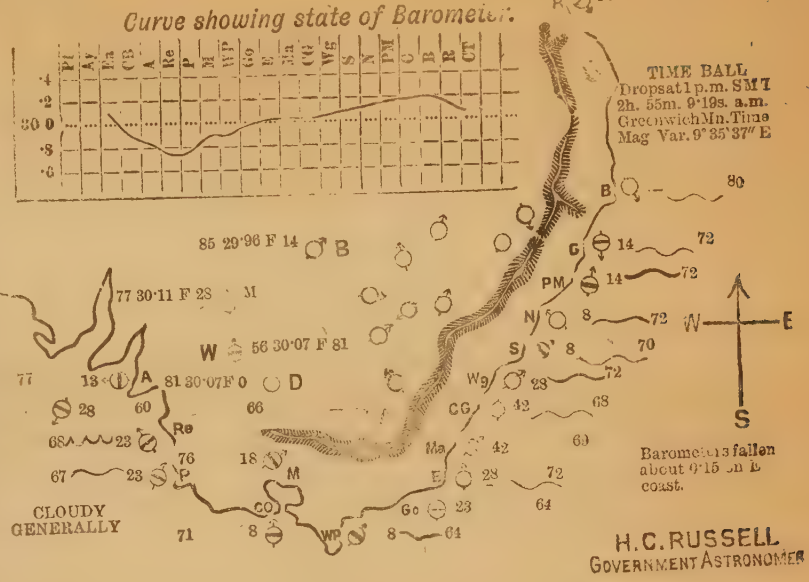
Stations	wt	Mx	Mn	R'in
Albury ..	c	91	49	0
Armidale	b	82	58	0
Balranald	c	100	55	0
Bathurst	g	88	50	0
Bend'm'r	b	85	57	0
Bodalla ..	b	—	—	0
Bourke ..	b	105	64	0
C'md'n H.	b	77	65	0
C. St. Geo.	b	69	59	0
Carcoar ..	b	77	63	0
Casino ..	c	85	63	0
Cassilis .	b	—	65	0
Clarence	g	84	65	0
C'nd'b'lin	b	76	43	0
Cooma ..	c	86	40	0
Coonab'n	b	92	55	0
C'nam ble	b	—	—	0
Cowra ..	b	82	74	0
Deniliq'n	c	91	52	0
Dubbo ..	b	95	61	0
Eden	c	70	52	0
Euston ..	g	96	52	0
Forbes ..	b	91	57	0
Gl'n Inn's	b	88	56	0
Goulburn	b	82	51	0
Grafton ..	b	—	—	0
Gunned'h	b	96	70	0
Hay	b	91	61	0
Hill End	b	—	—	0
Inverell ..	b	85	61	0
Kiandra	c	72	30	0
Lismore	–	—	—	—
Maitland	b	78	60	0
Marsdens	b	91	65	0
Menindie	c	89	67	0
Molong ..	b	94	57	0
Moree ..	b	94	65	0
Moruya ..	c	73	60	0
Moss Vale	b	68	54	0
M. Vict'ria	b	77	49	0·02
Mudgee ..	c	93	54	0
M'rr'mb'h	b	90	58	0
M rr'ndi	b	84	65	0
Mus'lb r'k	b	94	52	0
Narrabri	b	99	68	0
Newcastle	b	75	64	0
Nowra ..	–	—	—	—
Orange ..	c	81	52	0
Picton ..	o	72	63	0
P. M'q'rie	c	81	58	0
P.St'ph'ns	b	80	61	0
Q'nbeyan	b	79	60	0
Quirindi	c	91	62	0
Singleton	b	81	61	0
SYDNEY ..	g	73	61	0
Tamw'rth	–	—	—	—
Taralga ..	b	85	52	0
Taree	b	83	63	0
T'nt'rfield	c	84	56	0·08
Wagga ..	b	95	50	0
Walcha ..	c	81	53	0
Walgett ..	b	99	66	0
W'ntw'rth	g	93	68	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	76	61	0
Young ..	c	92	55	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·242
Average for 27 years from Jan. 1st to September 31 44·497
Total Rainfall from January 1st to November 21.. 35·683
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy wind E. T. storm, wind S. Rain, wind W. If it is CALM, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W... gives the state of the weather at nine a.m. b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy, m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; a, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometer round the coast from Perth to Cooktown—Pt. Perth, Ay. Albany, Ea. Eucla, CB. Cape Borda, A. Adelaide, Re. Robe, P. Portland, M. Melbourne, W. Wilson's Promontory, Go. Gabo, E. Eden, Ma. Moruya; CG. Cape Bay, Wg. Wagga, S. Sydney, N. Newcastle, PM. Port Macquarie; C. Clarence River, Br. Brisbane, R. Rockhampton, Ct. Cooktown. Inland the state of barometer is given in gates at Albury, Deniliquin, Wentworth, Menindie, Bourke and Alice Springs. The barometer curve enables one to trace the development, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

South Australia.—Generally gloomy and sultry inland to Peake. Prevailing winds N. to N.W., tending to W. and fresh to strong. Moderate and rough sea and falling barometer on coast. Northerly winds and hot in interior. No rain.

Victoria.—Generally cloudy, with light northerly and N.E. winds and smooth sea. Barometers falling. Fresh N. wind and fine, but cloudy at Echuca; no rain.

Tasmania.—Dull on W. coast, with fresh N.E. wind.

New Zealand.—Russell, bar. 30·00, wind S.W., fine; Wellington, bar. 29·80, wind S.W., showery; Bluff, bar. 29·90, wind S.W., fine.

New South Wales.—Generally fine and clear, with light northerly winds and calms; falling barometers, and smooth sea on coast. Light rains recorded at Tenterfield (0·08) and Mount Victoria (0·02), but nothing elsewhere; scattered clouds in places on coast. Details in map. As will be seen below, the Darling at Pooncarie has stopped running.

Queensland.—Fine and clear on E. coast, with S.E. and E. winds, and calms, and smooth sea. Rainfall: Brisbane, 0·01.

3 P.M. OBSERVATIONS.

New South Wales.—Cape St. George, N., 42, fine, moderate sea, temperature 67°; Clarence River, N.E., 20, fine, moderate sea, temperature 77°; Deniliquin, calm, fine, temperature 81°; Dubbo, calm, fine, temperature 83°; Eden, N.E., 14, fine, little sea, temperature 72°; Goulburn, W., 10, fine, temperature 74°; Menindie, calm, fine, but cloudy, temperature 66°; Moruya, N.E., 10, fine, moderate sea, temperature 69°; Newcastle, N.E., 30, fine, smooth sea, temperature 72°; Port Macquarie, N.N.E., 10, fine, smooth sea, temperature 75°; Sydney, N.E., 30, fine, moderate sea, temperature 71°; Wentworth, W., 40, fine, temperature 83°.

Victoria.—Cape Otway, W.N.W., 18, threatening, rough sea, temperature 61°; Wilson's Promontory, N.N.W., 18, showery, smooth sea, temperature 59°; Portland, S.W., 36, fine, smooth sea, temperature 57°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 4 inches above summer level; at Hay, 1 foot 3 inches above summer level; at Balranald, 3 feet above summer level. Murray: At Albury, 2 feet 2 inches above summer level; at Euston, 13 feet 7 inches above summer level. Darling: At Wentworth, 10 feet 8 inches above summer level; Pooncarie stopped running; Menindie, Wilcannia, and Bourke, low.

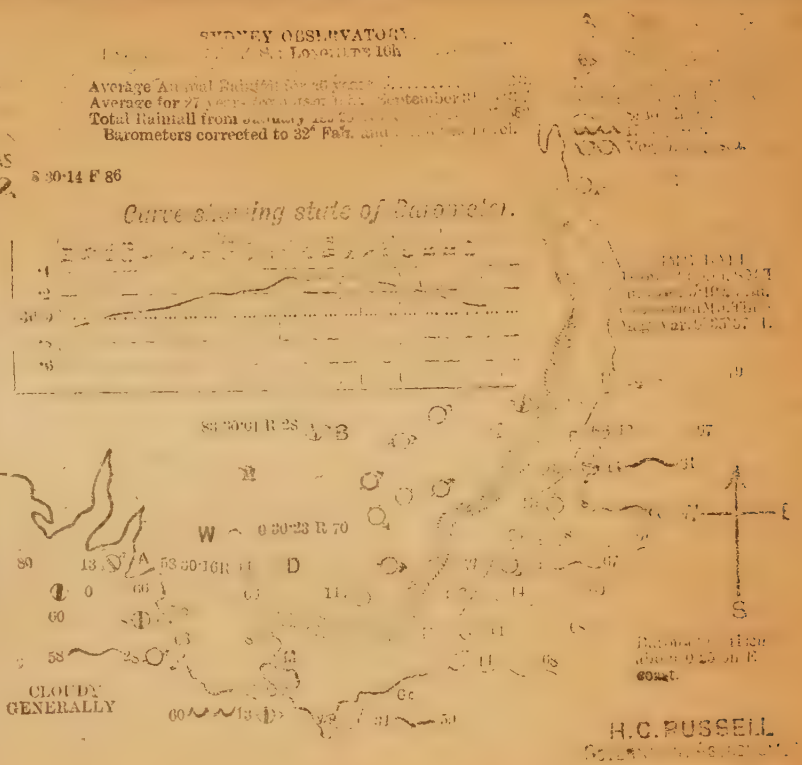
ASTRONOMICAL MEMORANDA FOR NOVEMBER 27.

Sun rises at 4.46, sets at 6.47; Moon, 7.[illegible] p.m., 5.[illegible] a.m., Mercury, 5.52 a.m., [illegible] p.m.; Venus, 7.[illegible] a.m., 10.[illegible] p.m.; Mars, 12.55 a.m., [illegible] p.m.; Jupiter, 1.54 a.m., 1.5[illegible] p.m.; Saturn, 9.23 p.m., 7.1[illegible] a.m. New moon, 8th; full moon, 22nd.

High water at Port Denison, November 23; 8.39 a.m., 8.2 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 24, 1884.

Stations	wind	Mean	
Albury	b	97 [illegible]	0
Armidale	u	[illegible]	0
Balranald	b	89 42	0
Bathurst	b	92 48	0
Bend'n'r	b	85 55	0
Bodalla	g	81 49	0
Bourke	g	108 63	0
Cnd'n H.	b	81 62	0
C. St. Geo.	b	69 51	0
Casino	b	80 54	0
Casino	u	97 [illegible]	[illegible]
Cassilis	b	[illegible]	[illegible]
Cl[illegible]	[illegible]	87 [illegible]	[illegible]
C'nd'lbin	c	7[illegible]	[illegible]
Cooma	b	73 15	[illegible]
Cooma	b	[illegible]	[illegible]
Cr'amble	b	—	0
Cowra	b	81 [illegible]	0
Deniliq'n	b	93 44	0
Dubbo	b	98 56	0
Eden	b	7[illegible]	0
Euston	b	90 59	0
Forbes	b	95 52	0
Gl'n Inn's	u	8[illegible]	[illegible]
Goulburn	b	79 [illegible]	[illegible]
Grafton	u	100 65	0·35
Gunned'h	—	—	—
Hay	c	97 52	0
Hill End	b	—	0
Inverell	b	88 61	0
Kiandra	b	77 35	0
Lismore	u	96 66	0·79
Maitland	b	94 60	0
Marsdens	b	94 63	0
Menindie	—	—	—
Molong	b	96 54	0
Moree	b	95 68	0
Moruya	c	71 56	0
Moss Vale	—	—	—
M. Victoria	g	87 43	0·03
Mudgee	b	97 49	0
M'rr'mb'h	b	93 48	0
M'rr'ndi	b	86 61	0
Mus'lbr'k	b	102 55	0
Narrabri	b	99 63	0
Newcastle	b	90 60	0
Nowra	b	69 47	0
Orange	b	83 45	0
Picton	b	68 48	0
P. M'q'rie	g	82 60	0
P. St'ph'ns	c	78 57	0
Q'nsc'yan	b	86 54	0
Quirindi	c	89 57	0
Singleton	b	83 61	0
Sydney	c	69 56	0
Tam'w'rth	b	96 59	0
Tamba[illegible]	[illegible]	89 47	0
Tarce	[illegible]	89 61	0·01
Tat'rfield	u	86 [illegible]	0·05
Wagga	—	—	—
Walcha	g	79 49	0
Walgett	b	99 [illegible]	0
W'nt'w'rth	b	8[illegible] 61	0
Wilcannia	c	—	0
W'll'ng'ng	b	67 [illegible]	0
Young	b	98 [illegible]	0



Mus'lbr'k	b	102 55	0
Narrabri	b	99 63	0
Newcastle	b	90 60	0
Nowra	b	69 47	0
Orange	b	83 45	0
Picton	b	68 48	0
P. M'q'rie	g	82 60	0
P. St'ph'ns	c	78 57	0
Q'nsc'yan	b	86 54	0
Quirindi	c	89 57	0
Singleton	b	83 61	0
Sydney	c	69 56	0
Tam'w'rth	b	96 59	0
Tamba[illegible]	[illegible]	89 47	0
Tarce	[illegible]	89 61	0·01
Tat'rfield	u	86 [illegible]	0·05
Wagga	—	—	—
Walcha	g	79 49	0
Walgett	b	99 [illegible]	0
W'nt'w'rth	b	8[illegible] 61	0
Wilcannia	c	—	0
W'll'ng'ng	b	67 [illegible]	0
Young	b	98 [illegible]	0

NOTE. [illegible] OBSERVATORY [illegible]

In the list of stations the column headed W.T. gives the state of the weather at [illegible] standing for blue sky; [illegible] threatening. The [illegible] hours. M'n the corresponding [illegible] hours. The symbols used in [illegible] the wind symbol is placed [illegible] coming. A [illegible] of the sea; and, lastly, figure-curve shows the state of [illegible] Perth; Ay, Albany; Fa, [illegible] M Melbourne; W P Wilson's [illegible]

Western Australia.—Generally [illegible] with light S.W. or S.E. winds and smooth sea. Rainfall: Esperance Bay, [illegible].

South Australia reports [illegible] prevailing winds [illegible] fresh; barometers falling, smooth sea on coast. Rainfall: [illegible].

Victoria.—Generally fine, scattered clouds, smooth sea, falling barometers, and light N.N.E. to E.N.E. winds; rough sea and cloudy at C. Otway; fine but cloudy with light N.E. wind inland at Echuca; no rain.

Tasmania.—Fine and clear on N. coast, with fresh N.N.E. wind and rising barometers.

New Zealand.—Russell, bar. 30·10, wind calm, dull; Wellington, bar. 29·90, wind N.W., fine; Bluff, bar. 30·00, wind S., dull.

New South Wales.—Generally fine and clear, with light N.E. to S.E. winds and rising barometers; smooth sea and light southerly winds on coast. Rainfall: Lismore, 0·79; Casino, 0·58; Grafton, 0·35. (See map above for details.)

Queensland.—Generally fine, with light S.E. winds and moderate sea; dull at Cooktown. Rainfall: Brisbane, 0·10; Cape Moreton, 0·07.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 12, cloudy, temperature 68°; Cape Otway, E., 12, overcast, rough sea, temperature 63°; Portland, E.S.E., 15, fine, smooth sea, temperature 63°; Wilson's Promontory, [illegible], cloudy, [illegible] temperature [illegible]; Lake Entrance, N.E., 8, dull, hazy, smooth sea, temperature 65°.

New South Wales.—Albury, W., [illegible], temperature 78°; Cooma, S., 14, fine, [illegible]; Deniliquin, calm, fine, temperature 76°; [illegible] temperature 70°; Eden, N.E., 14, fine, smooth [illegible] temperature 64°; Goulburn, E.N.E., fine, temperature 70°; Moruya, [illegible] fine, smooth sea, temperature 67°; Newcastle, S.E., 14, fine, smooth sea, temperature 66°; Port Macquarie, S.E., 14, cloudy, smooth sea, temperature 70°; Sydney, E.S.E., 8, fine, smooth sea, temperature 66°; Walgett, calm, hot, temperature 92°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet above summer level; at Hay, 1 foot 4 inches above summer level; at Balranald, 5 feet above summer level; at Euston, 13 feet above summer level. Darling: At Wentworth, 10 feet 3 inches above summer level; Wilcannia, and Bourke, low.

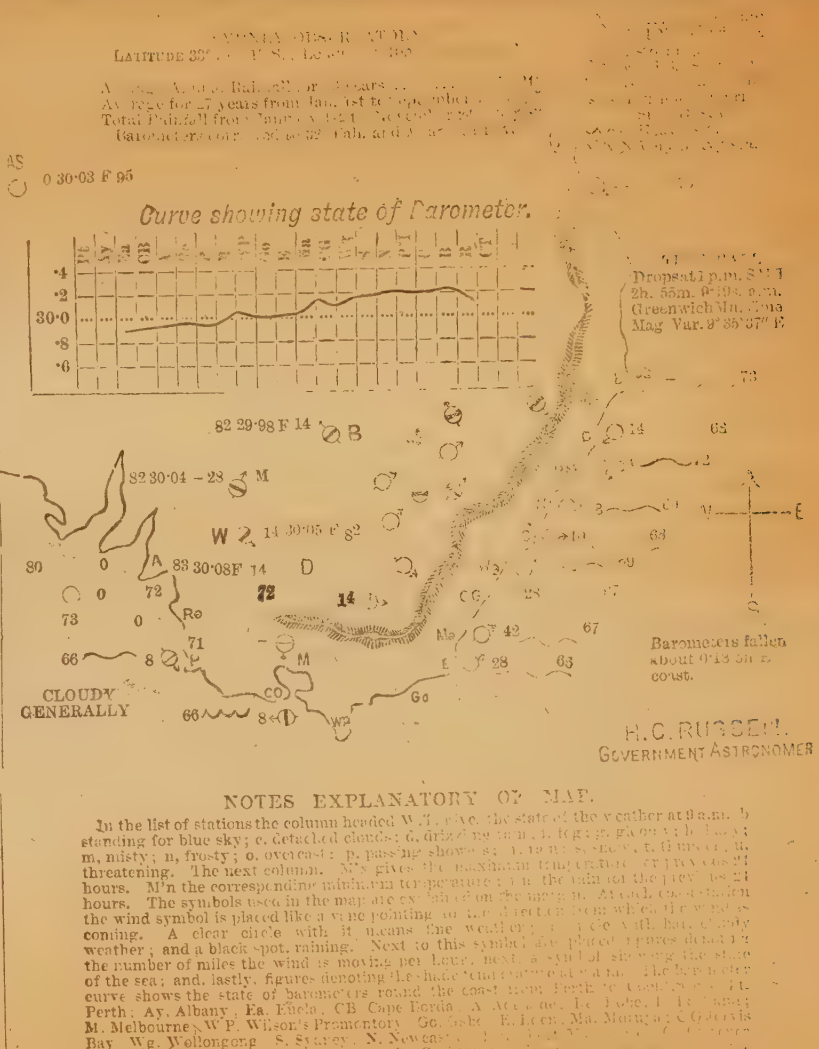
ASTRONOMICAL MEMORANDA FOR NOVEMBER 24.

Sun rises at 4.46, sets at 6.48; Moon, 8·51 p.m., 6.3 a.m.; Mercury, 5.53 a.m., 8.25 p.m.; Venus, 7.52 a.m., 10.24 p.m.; Mars, 12.52 a.m., 11.59 p.m.; Jupiter, 1.51 a.m., 1.[illegible] p.m.; Saturn, 9.19 p.m., 7.15 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, : 9.24 a.m., 9.47 p.m.

METEOROLOGICAL REPORTS AND MAP FOR [illegible]

Stations	wt	Mx	Mn	R'fall
Albury	c	90	51	0
Armidale	b	79	57	0
Balranald	g	106	59	0
Bathurst	b	84	48	0
Bend'm'r	u	87	53	0
Bodalla ..	b	74	43	0
Bourke ..	g	112	74	0
C'md'n H.	b	81	59	0
C. St. Geo.	b	72	56	0
Carcoar ..	b	77	56	0
Casino ..	c	74	61	0
Cassilis ..	b	—	60	0
Clarence	b	86	62	0
C'nd'b'lin	c	78	56	0
Cooma ..	g	84	39	0
Coonab'n	c	95	56	0
C'nam ble	u	—	—	0
Cowra ..	b	83	—	0
Deniliq'n	b	95	36	0
Dubbo ..	b	96	58	0
Eden	c	69	55	0
Euston ..	g	98	59	0
Forbes ..	c	92	—	0
Gl'n Inn's	c	85	58	0
Goulburn	b	80	44	0
Grafton ..	-	—	—	—
Gunned'h	b	95	66	0
Hay	u	—	—	0
Hill End	b	—	—	0
Inverell.	o	88	61	0
Kiandra	c	76	33	0
Lismore	u	73	65	0
Maitland	b	86	55	0
Marsdens	b	92	68	0
Menindie	g	93	77	0
Molong ..	b	91	53	0
Moree ..	g	94	66	0
Moruya ..	b	73	51	0
Moss Vale	c	71	48	0
M. Vict'ria	b	76	45	0
Mudgee ..	b	88	49	0
M'rr'mb'h	b	78	57	0
M rr'r'ndi	b	81	59	0
Mus'lbr'k	b	88	50	0
Narrabri	b	103	71	0
Newcastle	b	82	61	0
Nowra ..	-	—	—	—
Orange ..	c	80	50	0
Picton ..	b	77	52	0
P. M'q'rie	c	73	56	0
P.St'ph'ns	b	72	53	0
Q'nbeyan	b	75	52	0
Quirindi	c	90	57	0
Singleton	b	77	56	0
SYDNEY ..	b	69	56	0
Tamw'rth	c	90	61	0
Taralga ..	b	85	43	0
Taree	c	82	59	0
T'nt'rfield	u	76	53	0
Wagga ..	b	88	60	0
Walcha ..	c	75	52	0
Walgett..	g	103	72	0
W'ntw'rth	c	96	61	0
Wilcannia	u	—	—	0
W'll'ng'ng	b	75	50	0
Young ..	b	89	55	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m. b standing for blue sky; c, detached clouds; d, drizzling rain; f, foggy; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; [illegible] threatening. The next column, M'x gives the maximum temperature for the last 24 hours. M'n the corresponding minimum temperature; in the table for the previous 24 hours. The symbols used in the map are explained on the margin. A cold, cloudy [illegible] the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means the weather [illegible] weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the height [illegible] curve shows the state of barometers round the coast from Perth to [illegible] Perth, Ay, Albany, Ea, Eucla, CB Cape Borda, A Adelaide, Le Lobe, [illegible] M. Melbourne, W P. Wilson's Promontory, Go, Gabo, E. Eden, Ma. Moruya, C G Jervis Bay, Wg. Wollongong, S. Sydney, N. Newcastle, [illegible] River, B. Brisbane, R. Rockhampton, Ct Cooktown, [illegible] is given in figures at Albury, Deniliquin, Wentworth, [illegible] Springs. The barometer curve commences at the [illegible] beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

South Australia reports weather generally hot, fine, and sultry inland. Scattered clouds on coast, and in S.E. Dull on Murray. Light rains recorded N. of Adelaide to Farina, Oraroo, and Kapunda. Prevailing winds light, from E. to N., and calm, smooth sea, falling barometers, and calm on coast. Rainfall: Port Darwin, 0·18; Farina, 0·01; Port Augusta, 0·07; Eucla, 0·04; Kapunda, 0·11.

Victoria.—Generally cloudy, with light variable winds, and falling barometers. Rough sea at Cape Otway, cloudy inland, with N.E. wind at Echuca, and calm at Omeo; no rain.

Tasmania.—Dull on N. coast, with fresh S.S.W. wind.

New Zealand.—Russell, barometer 30·20, wind E., fine generally; Wellington, barometer 30.20, wind S.E., fine generally; Bluff, barometer 30·30, wind E., fine generally.

New South Wales.—Generally fine and clear, on coast, with light N.E. winds, smooth sea and falling barometers; cloudy generally inland with light variable N.E. to S.E. winds and calms; barometer falling; no rain. (Details in map above.)

Queensland.—Generally cloudy and unsettled; winds S. and S.E.; sea moderate; no rainfall.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers falling, E., 12, fine, temperature 78°; Cape Otway, E., 6, foggy, sea rough, temperature 74°; Portland, S.E., 18, fine, sea smooth, temperature 72°; Wilson's Promontory, N.E., 24, hazy, upper clouds from N.W., sea rough, temperature 66°; Lake Entrance, N.E., 6, [illegible] smooth sea, temperature 71°.

New South Wales.—Albury, E., cloudy, [illegible] 8°; Cape St. George, N., 28, fine, [illegible] 66°; Clarence River, S.E., 14, [illegible] 71°; Deniliquin, N., fine, temperature 82°; [illegible], calm thunder to eastward, temperature [illegible]; Eden, N., 25, fine, slight [illegible] temperature 68°; Goulburn, E.N.E., 13, fine, temperature 71°; Moruya, N.E., 42, fine, sea moderate, temperature 66°; Newcastle, N.E., fine, smooth sea, temperature 66°; Wentworth, N.W., like rain, temperature 83°; Walgett, N.W., dull, like rain, temperature 83°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 11 inches above summer level; at Balranald, 2 feet above summer level. Murray: At Albury, 2 feet 9 inches above summer level; at Euston, 13 feet above summer level. Darling: At Wentworth, 10 feet 1 inch above summer level; Pooncarie, Menindie, Wilcannia, and Bourke, low.

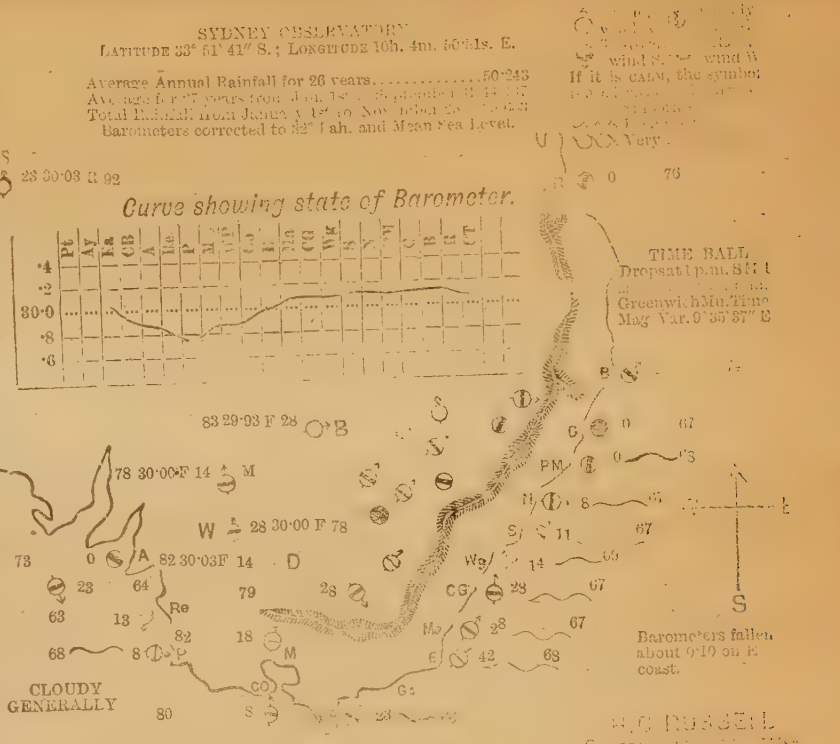
ASTRONOMICAL MEMORANDA FOR NOVEMBER 25.

Sun rises at 4.45, sets at 6.49; Moon, 9·49 p.m., 7.7 a.m.; Mercury, 5.55 a.m., 8.28 p.m.; Venus, 7.54 a.m., 10.25 p.m.; Mars, 12.50 a.m., 11.57 a.m.; Jupiter, 1.47 a.m., 1.49 p.m., Saturn, 9.15 p.m., 7.11 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison, : 10.10 a.m., 10.33 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 26, 1888.

Stations	wt	Mx	Mn	R'in
Albury	c	93	72	0·02
Armidale	g	84	59	0
Balranald	g	103	58	0
Bathurst	u	72	57	0·03
Bend'm'r	u	87	64	0·29
Bodalla ..	—	—	—	—
Bourke ..	b	87	70	0
C'md'n H.	c	74	64	0
C. St. Geo.	c	67	63	0
Carcoar ..	u	78	61	0·16
Casino ..	g	84	63	0
Cassilis .	g	—	63	0
Clarence	r	81	62	0
C'nd'b'lin	c	76	56	0
Cooma ..	g	95	46	0·04
Coonab'n	u	96	62	0·13
C'nam ble	c	—	—	0
Cowra ..	u	83	—	0·56
Deniliq'n	b	87	58	0
Dubbo ..	b	93	70	0·05
Eden	c	69	62	0
Euston ..	g	104	69	0
Forbes ..	u	97	64	0·20
Gl'n Inn's	u	81	58	0·27
Goulburn		89	55	0
Grafton ..		80	68	0
Gunned'h	c	95	68	0·21
Hay	b	91	41	0
Hill End	c	—	—	0·18
Inverell ..	u	80	61	1·00
Kiandra	c	78	51	0
Lismore	u	82	66	0
Maitland	n	86	63	0
Marsdens	b	92	71	0·05
Menindie	c	93	69	0
Molong ..	u	91	64	0·34
Moree ..	c	88	67	0·10
Moruya ..	g	72	61	0
Moss Vale	u	77	54	0
M. Vict'ria	u	81	51	0
Mudgee ..	g	89	57	0
M'rr'mb'h	c	94	73	0·26
M rr'r'ndi	u	80	65	0·12
Mus'lbr'k	u	91	58	0
Narrabri	u	90	63	0·17
Newcastle	g	71	64	0
Nowra ..	c	75	53	0
Orange ..	g	84	57	0·33
Picton ..	u	82	62	0
P. M'q'rie	g	78	63	0
P.St'ph'ns	g	77	61	0
Q'nbeyan	c	83	62	0
Quirindi	u	88	64	0
Singleton	g	82	66	0
SYDNEY ..	g	70	64	0
Tamw'rth	g	90	65	0·03
Taralga ..	c	91	51	0·08
Taree	g	82	60	0
T'nt'rfield	u	86	56	0
Wagga ..	b	91	69	0
Walcha ..	u	79	59	0·26
Walgett ..	u	96	65	0
W'ntw'rth	g	100	—	0
Wilcannia	c	—	—	0·10
W'll'ng'ng	c	71	65	0
Young ..	p	95	62	0·56



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed "wt" [illegible] standing for "weather" [illegible] m. misty; n. [illegible] thunderstorm. The columns headed "Mx" and "Mn" [illegible] hours. M'n the corresponding minimum [illegible] hours. The symbols used in the map are [illegible] the wind symbol is placed like a vane pointing [illegible] coming. A clear circle with it means [illegible] weather, and a black spot, raining. Next to [illegible] the number of miles the wind is [illegible] of the sea; and, lastly, figures [illegible] curve shows the state of the barometer [illegible] Perth, Ag., Albury, [illegible] M., Melbourne, W.P., Wilson's Promontory [illegible] Bay, Wg., Wollongong, S., Sydney, N., Newcastle, P.M., Port Macquarie; C. [illegible] River, B., Brisbane; R., Rockhampton; Ct., Cooktown. Inland the state of the barometer is given by figures at Albury, Deniliquin, Wentworth, Menindie, Dubbo, and Cooma Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

South Australia reports weather generally dull, but with scattered clouds; inland weather sultry, gloomy, and hot. Light southerly winds, with smooth sea and steady barometers, on coast; winds generally variable and calm. Rainfall: Daly Waters, 0·13; Alice Springs, 0·06; and Eucla, 0·23.

Victoria.—Generally cloudy, smooth and moderate sea, falling barometers, and light N. and N.N.E. winds on coast. Few clouds and fresh N. wind at Omeo. Rainfall: Portland, 0·04; Lake Entrance, 0·01.

Tasmania.—Dull and sultry on N. coast; light E.N.E. wind.

New Zealand.—Russell, barometer 30·20, wind N.E., 34, dull; Wellington, barometer 30.20, wind S., fine; Bluff, barometer 30·30, wind E., dull.

New South Wales.—Generally cloudy and gloomy; fine at very few S.W. and W. stations. (See map above.) Raining over the Clarence River district, and inland at Young; heaviest fall at Inverell, 1·00; smooth sea, falling barometers, and light to fresh N. and N.E. winds on coast; falling barometers, and light N.E. to S.E. winds and calms inland.

Queensland.—Cloudy on E. coast, with N.E. to S.E. winds and moderate sea. Misty rain falling at Cape Moreton, but none recorded.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, barometers steady, S., 12, gloomy, thunderstorm, and heavy rain, temperature 64°; Cape Otway, E., 6, showery, moderate sea, temperature 68°; Portland, W.S.W., 24, cloudy, moderate sea, temperature 72°; Wilson's Promontory, N.E., 24, gloomy, squally, like rain, moderate sea, temperature 63°.

New South Wales.—Albury, E., dull, like change, temperature 80°; Cape St. George, N., 42, fine, moderate sea, temperature 68°; Clarence River, calm, overcast, moderate sea, temperature 69°: Deniliquin, N., fine, temperature 86°; Dubbo, W., showery, temperature 79°; Goulburn, E.N.E., dull, temperature 72°; Menindie, W., fine, temperature [illegible]; [illegible], S.E., 42, fine, moderate sea, temperature 68°; Newcastle, E., fine, smooth sea, temperature 69°; Port Macquarie, N.E., 14, cloudy, smooth sea, temperature 72°; Sydney, N.E., 13, dull, smooth sea, temperature 69°; Wentworth, N., cloudy, temperature 86°; Walgett, W., fine, temperature 92°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 9 inches above summer level; at Hay, 1 foot 3 inches above summer level; at Balranald, 1 foot 9 inches above summer level. Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 12 feet 9 inches above summer level. Darling: At Wentworth, 9 feet 11 inches above summer level; Pooncarie, Menindie, Wilcannia, and Bourke, low.

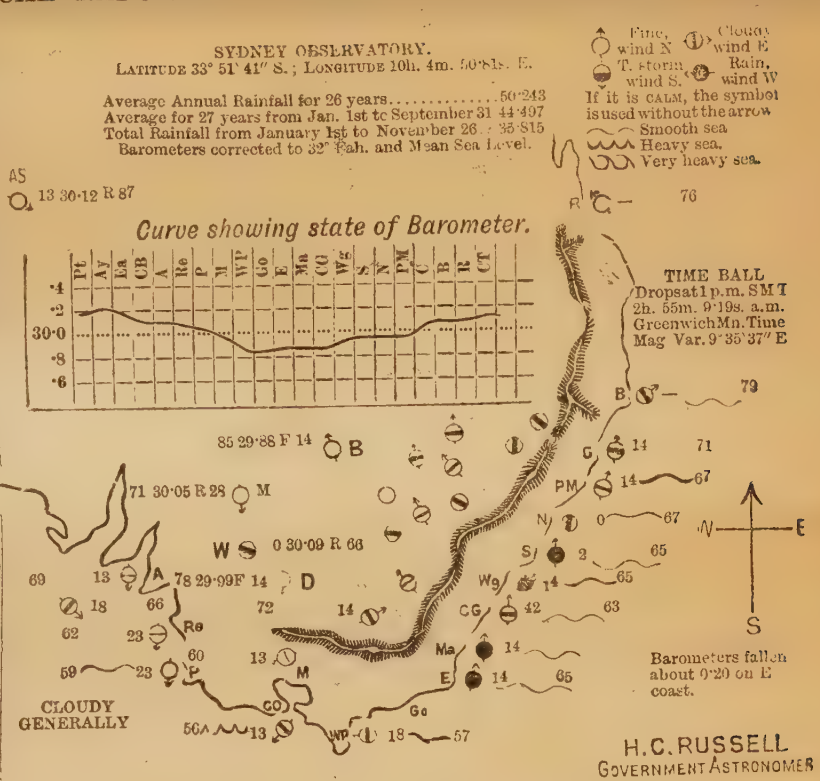
ASTRONOMICAL MEMORANDA FOR NOVEMBER 26.

Sun rises at 4.45, sets at 6.50; Moon, 10·42 p.m., 8.9 a.m.; Mercury, 5.56 a.m., 8.30 p.m.; Venus, 7.55 a.m., 10.25 p.m.; Mars, 12.47 a.m., 11.55 a.m.; Jupiter, 1.44 a.m., 1.46 p.m.; Saturn, 9.11 p.m., 7.7 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 10.55 a.m., 11.19 p.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 26, 1888

Stations	wt	Mx	Mn	R'in
Albury	u	90	63	0·22
Armidale	u	69	60	1·08
Balranald	b	101	58	0
Bathurst	r	80	59	0·94
Bend'm'r	p	75	61	0·33
Bodalla ..	–	—	—	—
Bourke ..	b	105	71	0
C'md'n H.	c	75	64	0
C. St. Geo.	c	72	64	0·13
Carcoar ..	r	73	53	0·95
Casino ..	c	76	65	0·04
Cassilis ..	u	—	66	0·32
Clarence	g	73	63	0
C'nd'b'lin	b	75	54	0·60
Cooma ..	r	89	56	0·25
Coonab'n	g	89	64	0·68
C'nam ble	g	—	—	0·60
Cowra ..	u	82	—	1·12
Deniliq'n	b	97	57	0·06
Dubbo ..	g	92	67	0·17
Eden	r	71	62	0
Euston ..	b	94	59	0
Forbes ..	u	95	65	0·72
Gl'n Inn's	–	—	—	—
Goulburn	g	79	57	0·37
Grafton ..	u	85	77	0·07
Gunned'h	g	90	70	0
Hay	b	99	61	0
Hill End	b	—	—	0
Inverell..	g	81	66	0·20
Kiandra	g	71	52	0·37
Lismore	u	74	69	0
Maitland	–	—	—	—
Marsdens	b	88	72	0·54
Menindie	c	93	68	0·43
Molong ..	u	77	65	0·14
Moree ..	u	88	66	0·20
Moruya..	r	74	62	0·14
Moss Vale	u	72	56	0·30
M. Vict'ria	u	73	54	0·66
Mudgee..	g	87	58	2·27
M'rr'mb'h	c	83	67	0·32
M.rr'r'ndi	u	78	59	0·25
Mus'lbr'k	g	82	59	0·39
Narrabri	u	99	68	0·30
Newcastle	u	70	65	0
Nowra ..	b	78	61	0
Orange ..	–	—	—	—
Picton ..	r	80	63	0·09
P. M'q'rie	g	77	65	0
P.St'ph'ns	u	79	64	0
Q'nbeyan	c	80	65	0·13
Quirindi	p	85	63	0·50
Singleton	–	—	—	—
SYDNEY ..	r	73	64	0·13
Tamw'rth	–	—	—	—
Taralga ..	c	73	55	0·27
Taree	g	75	65	0
T'nt'rfield	u	79	60	0·04
Wagga ..	u	95	64	1·55
Walcha ..	r	66	57	0·65
Walgett..	c	100	69	0
W'ntw'rth	c	97	57	0·53
Wilcannia	c	—	—	0
W'll'ng'ng	r	75	67	0·09
Young ..	u	92	63	0·25



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown – Pt, Perth; Ay, Albany; Ea, Eucla, CB, Cape Borda, A, Adelaide, Re, Robe, P, Portland; M, Melbourne; WP, Wilson's Promontory, Go, Gabo, E, Eden; Ma, Moruya; CG, Jervis Bay, Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River, B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine, with light S.E. winds and calm, sea smooth, dull at Esperance Bay, no rain.

South Australia reports weather generally dull on and near coast, and scattered clouds inland. Prevailing winds S.W. to S.E., and light. Dull in northern territory. Thunderstorm in night at Alice Springs, Daly Waters, and Port Darwin. Rainfall: Daly Waters, 0·42; Tennant's Creek, 0·05.

Victoria.—Generally cloudy, with light S. and S.W. winds, moderate sea, and rising barometer on coast. Fine, with fresh S.W. wind at Echuca. Thunderstorm and calm at Omeo. Thunderstorm with heavy rain, 3 p.m. to 5 p.m. on 25th, at Wilson's Promontory. Rainfall: Melbourne, 0·61; Wilson's Promontory, 0·76; Lake Entrance, 0·72; Echuca, 0·17; Omeo, 1·01. Dense fog at Wilson's Promontory until 7 a.m.

Tasmania.—Foggy, misty, and calm on N. coast. Rainfall: Low Heads, 0·31.

New Zealand.—Russell, barometer 30·20, wind E., generally fine and clear; Wellington, barometer 30·20, wind S., generally fine and clear; Bluff, barometer 30·30, wind W., generally fine and clear.

New South Wales.—Generally cloudy and unsettled throughout the colony, with light variable winds and calms; fine inland on the Darling; showery on coast, with light Northerly winds; smooth sea and falling barometer; thunderstorms in night at Albury. Rylestone reports showery until 8.30 a.m., 0·75 measured; Temora reports thunderstorm from S.W., during which 0·36 of rain fell, 9 a.m., weather close and cloudy. Full details in map.

Queensland.—Generally fine in North with S.E. winds; cloudy and showery in South with N.E. and E. winds. Rainfall: Cape Moreton, 0·07; sea moderate.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 12, cloudy, temperature 62°; Cape Otway, S., 30, cloudy, smooth sea, temperature 63°; Portland, S.S.W., fine, foggy, rough sea, temperature 40°; Wilson's Promontory, W., 30, misty, squally, moderate sea, temperature 60°; Lake Entrance, S.E., 14, cloudy, smooth sea, temperature 65°.

New South Wales.—Albury, E., cloudy, temperature 80°; Cape St. George, N., 28, cloudy, rain 0·10, moderate sea, temperature 64°; Clarence River, N.E., dull, smooth sea, temperature 75°; Deniliquin, N., fine, temperature 86°; Dubbo, W., 14, thunderstorm from West, temperature 80°; Eden, N., 14, showery, light sea, temperature 65°; Goulburn, calm, dull, temperature 72°; Moruya, E.N.E., 14, cloudy, moderate sea, temperature 59°; Newcastle, N.E., fine, smooth sea, temperature 70°; Port Macquarie, N.N.E., 42, cloudy, smooth sea, temperature 73°; Sydney, N.E., 8, dull, smooth sea, temperature 69°; Wentworth, W., fine, clear, temperature 74°; Walgett, S.W., fine, hot, temperature 87°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 9 inches above summer level; at Balranald, 1 foot 4 inches above summer level; Murray: At Albury, 1 foot 9 inches above summer level; at Euston, 12 feet 4 inches above summer level. Darling: At Wentworth, 9 feet 9 inches above summer level; Pooncarie, Menindie, Wilcannia, and Bourke, low.

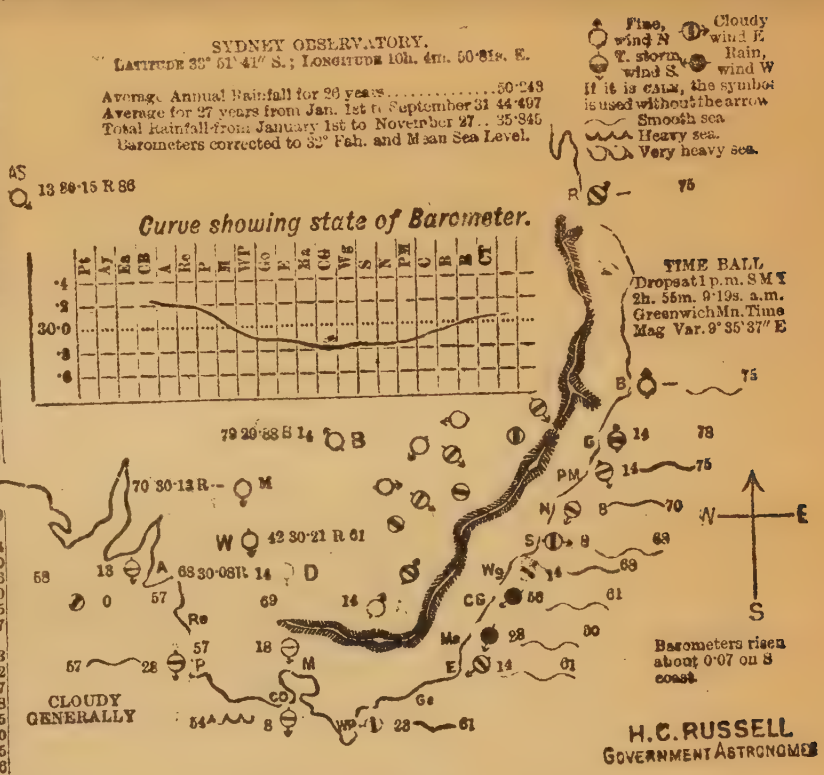
ASTRONOMICAL MEMORANDA FOR NOVEMBER 27.

Sun rises at 4.45, sets at 6.51; Moon, 11·29 p.m., 9·14 a.m.; Mercury, 5.58 a.m., 8.32 p.m.; Venus, 7.56 a.m., 10.26 p.m.; Mars, 12.45 a.m., 11.54 a.m.; Jupiter, 1.40 a.m., 1.43 p.m.; Saturn, 9.7 p.m., 7.3 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 11.42 a.m.

METEOROLOGICAL REPORTS AND MAP FOR NOVEMBER 27, [illegible]

Stations	wt	Mx	m	s	in
Albury	c	89	60		0
Armidale	u	70	61	0·03	
Balranald	b	97	48		0
Bathurst	b	79	56	0·05	
Berr'd'm'r	p	76	60	0·70	
Bodalla ..	g	75	59	0·16	
Bourke ..	b	103	67	0·18	
C'md'n H.	c	77	70		0
C. St. Geo.	r	70	60		0
Cargoar ..	g	72	61	0·36	
Casino ..	c	89	68	0·21	
Cassilis ..	o	—	63	0·62	
Clarence	u	81	66	0·08	
C'nd'b'lin	c	74	54	0·10	
Cooma ..	c	78	57	1·30	
Coonab'n	u	89	61	0·03	
C'nam ble	u	—	—		0
Cowra ..	c	80	—	0·10	
Deniliq'n	b	95	48		0
Dubbo ..	b	91	61	0·12	
Eden	u	65	59	0·23	
Euston ..	b	91	55		0
Forbes ..	u	80	63	0·10	
Gl'n Inn's	r	72	59	0·68	
Goulburn	g	80	58	0·41	
Grafton ..	u	94	69	0·35	
Gunned'h	g	90	62	0·29	
Hay	g	93	56		0
Hill End	u	—	—	0·34	
Inverell ..	u	78	60	0·20	
Kiandra	c	68	50	0·16	
Lismore	c	85	70	0·20	
Maitland	u	84	67	0·15	
Marsdens	c	86	71	0·07	
Menindie	b	84	63		0
Molong ..	c	85	63	0·53	
Moree ..	o	88	65	0·02	
Moruya ..	r	73	59	0·17	
Moss Vale	u	72	57	0·48	
M. Vict'ria	g	76	54	0·35	
Mudgee ..	u	60	56	0·20	
M'rr'mb'h	c	79	63	1·35	
M,rr'ndi	u	80	67	0·26	
Mus'lbr'k	g	94	65		0
Narrabri	u	97	67	0·05	
Newcastle	o	72	65		0
Nowra ..	—	—	—		—
Orange ..	c	77	55		0
Picton ..	c	75	61	0·33	
P. M'q'rie	c	80	67		0
P.St'ph'ns	c	82	65	0·04	
Q'nbeyan	c	80	64	0·65	
Quirindi	u	85	62	0·46	
Singleton	u	82	68	0·74	
SYDNEY ..	g	71	65	0·03	
Tamw'rth	g	81	61	0·50	
Taralga ..	g	81	68	0·40	
Taree	u	84	68	0·27	
T'nt'rfield	o	84	60	0·10	
Wagga ..	c	91	63	0·06	
Waloha ..	o	69	56	0·65	
Walgett ..	c	97	66	0·72	
W'ntw'rth	b	86	57		0
Wilcannia	c	—	—		0
W'll'ng'ng	u	73	61	0·20	
Young ..	u	88	61		0



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.P. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla, CB, Cape Borda, A, Adelaide, Re, Robe; P, Portland; M, Melbourne; W P, Wilson's Promontory; Go, Gabo, E, Eden; Ma, Moruya; C G Jervis Bay, Wg, Wollongong; S, Sydney, N, Newcastle, P M Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given for figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally cool and fine inland, scattered clouds on coast and N. of Farina. Prevailing winds S. to S.E., and light to fresh. Smooth sea and rising barometers on coast. Rainfall: Port Darwin, 0·08; Tennant's Creek, 0·02.

Victoria.—Generally cloudy, with fresh southerly winds, and rising barometers. Smooth sea on coast. Rainfall: Omeo, 0·03; Lake Entrance, 0.02; Cape Otway, 0·03.

Tasmania.—Dull on N. coast, with light N.E. wind.

New Zealand.—Russell, wind S.E., strong, dull; Wellington, wind N., fine; Bluff, wind W., fine. Barometer generally 30·20.

New South Wales.—Generally cloudy and threatening, especially on coast and in east of colony; raining in places. Fine and clear in interior; on the Darling, south from Walgett, winds light, and very variable throughout and calms; barometers rising in south part of colony, falling in north; smooth sea on coast. Camden reports weather overcast; rain, 0·60. Nowra, maximum 70, minimum 62; rain, 0·50. Full details in map above.

Queensland.—Generally fine, cloudy at Cape Moreton and Rockhampton; winds N. to S.E., sea moderate and slight. Rainfall: Brisbane, 0·07.

8 P.M. OBSERVATIONS.

New South Wales.—Albury, N.E., cloudy, fine, temperature 74°; Cape St. George, S.W., 28, showery, moderate sea, temperature 64°; Clarence River, N.E., dull, smooth sea, temperature 75°; Deniliquin, S., fine, temperature 79°; Eden, S.W., 28, like rain, slight sea, temperature 63°; Goulburn, calm, dull, temperature 69°; Menindie, S., 28, fine, temperature 71°; Moruya, S., 28, raining, moderate sea, temperature 61°; Newcastle, N.E., 8, fine, slight sea, temperature 69°; Port Macquarie, S.S.E., 28, sultry, moderate sea, temperature 81°; Sydney, S.S.W., 28, dull, smooth sea, temperature 68°; Wentworth, S.W., fine, temperature 71.; Walgett, S.W., 20, showery, temperature 86°.

Victoria.—Melbourne, S.S.W., 18, fine, but cloudy, temperature 58°; Lake Entrance, S.W., 37, cloudy and squally, moderate sea, temperature 60°; Portland, E.N.E., 28, fine, smooth sea, temperature 60°; Wilson's Promontory, W.S.W., 34, misty and squally, rough sea, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 3 inches above summer level; at Hay, 1 foot above summer level; at Balranald, 1 foot 4 inches above summer level. Murray: At Albury, 1 foot 7 inches above summer level; at Euston, 12 feet above summer level. Darling: At Wentworth, 9 feet 6 inches above summer level; Pooncarie, Menindie (dry), Wilcannia and Bourke, low.

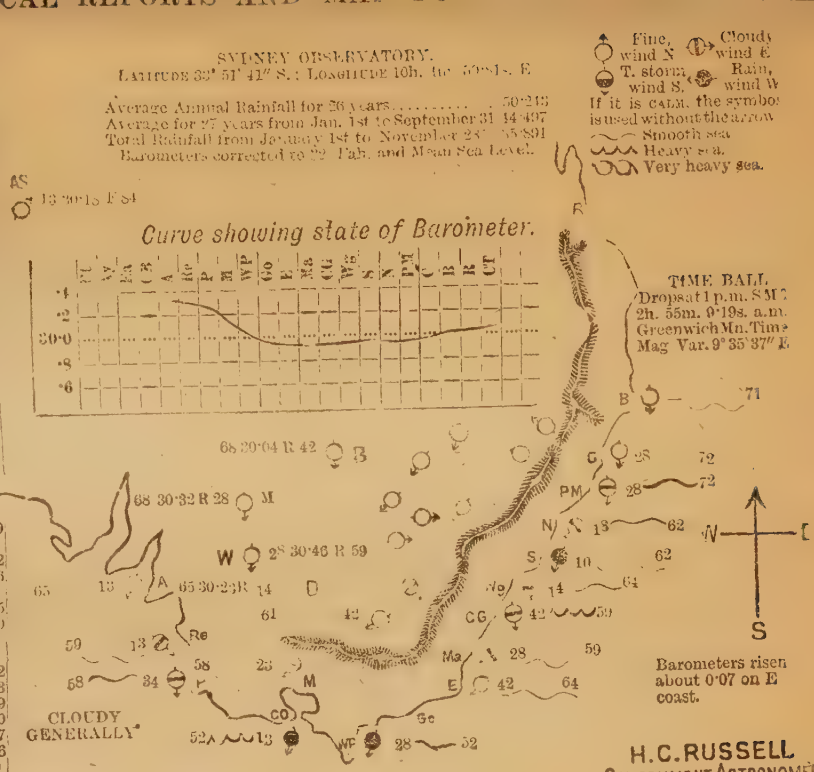
ASTRONOMICAL MEMORANDA FOR NOVEMBER 28.

Sun rises at 4.44, sets at 6.52; Moon, ——, 10·19 a.m.; Mercury, 5.59 a.m., 8.35 p.m.; Venus, 7.58 a.m., 10.26 p.m.; Mars, 12.42 a.m., 11.52 p.m.; Jupiter, 1.37 a.m., 1.39 p.m.; Saturn, 9.2 p.m., 6.58 a.m. New moon, 8th; full moon, 22nd.

High water at Fort Denison: 12.6 a.m., 12.30 p.m.

METEOROLOGICAL REPORTS AND MAP.

Stations	wt	Mx	m	r in
Albury	b	80	49	0
Armidale	b	76	57	0·15
Balranald	b	88	38	0
Bathurst	b	78	49	0·53
Bend'm'r	u	77	56	0·28
Bodalla ..	b	70	52	0·50
Bourke ..	b	96	58	0
C'md'n H.	c	75	65	0
C. St. Geo.	c	68	55	0·07
Carcoar ..	b	75	51	0·73
Casino ..	c	83	58	0·30
Cassilis .	–	—	—	—
Clarence	b	82	63	1·02
C'nd'b'lin	b	60	32	0
Cooma ..	b	73	42	0·70
Coonab'n	–	—	—	—
C'nam'ble	b	—	—	0
Cowra ..	b	79	—	0
Deniliq'n	b	75	44	0
Dubbo ..	b	91	52	0·01
Eden	c	67	63	0·12
Euston ..	b	81	45	0
Forbes ..	b	87	53	0
Gl'n Inn's	b	72	51	0·58
Goulburn	b	75	52	0·62
Grafton ..	c	90	65	0·37
Gunned'h	c	90	62	0·50
Hay	b	81	48	0
Hill End	b	—	—	0·32
Inverell ..	c	79	50	0·46
Kiandra	c	65	41	0
Lismore	c	80	65	0·25
Maitland	u	86	63	0·40
Marsdens	b	86	56	0
Menindie	b	80	57	0
Molong ..	b	91	53	0·22
Moree ..	b	90	60	0·03
Moruya ..	c	67	53	0·69
Moss Vale	u	66	49	0·20
M. Vict'ria	c	73	50	0·77
Mudgee ..	b	85	51	0·06
M'rr'mb'h	b	83	54	0
M rr'r'ndi	g	75	61	0·30
Mus'lbr'k	c	95	60	0·41
Narrabri	b	94	61	0·25
Newcastle	g	75	55	0·06
Nowra ..	b	70	53	0·19
Orange ..	b	79	47	0
Picton ..	c	78	60	0
P. M'q'rie	c	83	63	0·01
P.St'ph'ns	g	78	61	0·03
Q'nbeyan	c	80	54	0
Quirindi	–	—	—	—
Singleton	u	84	66	1·05
SYDNEY ..	d	74	60	0·05
Tamw'rth	o	84	58	0·62
Taralga ..	b	80	52	0·74
Taree	u	84	65	0·11
T'nt'rfield	b	79	51	0·19
Wagga ..	b	82	47	0
Walcha ..	c	72	52	0·19
Walgett ..	b	91	59	0
W'ntw'rth	b	78	50	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	76	58	0·05
Young ..	b	89	47	0·17



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frost; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany, Ea, Eucla, CP, Cape Borda, A, Adelaide, Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG Jervis Bay, Wg, Wollongong, S, Sydney, N, Newcastle, PM, Port Macquarie; C, Clarence River, B, Brisbane, R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally fine; scattered clouds north of Alice Springs and on coast; prevailing winds, S. to S.E. and generally light, but blowing as strong as 34 miles per hour in places; steady barometers and smooth sea on coast; thunderstorms yesterday north of Alice Springs. Rainfall—Port Darwin 0·54, Alice Springs 0·20, Katherine 1·04, and Tennant's Creek 0·01.

Victoria.—Generally cloudy; dull, squally, and showery in places on coast; wind strong from S.W. and S., sea moderate and rough, weather very thick and misty; fine but cloudy inland at Echuca, showery at Omeo. Rainfall—Melbourne 0·07, Portland 0·01, Cape Otway 0·04, Wilson's Promontory 0·02, and Omeo 0·03.

Tasmania.—Dull on north coast, with fresh S.S.W. wind. Rainfall—Low Heads, 0·70.

New Zealand.—Generally fine and clear, with light southerly wind and calms, and barometers standing at 30·20.

New South Wales.—Generally fine, cloudy on coast and in eastern division generally. Barometers rising throughout. Fine and clear in the West, with strong southerly winds. Moderate sea and very general southerly winds, fresh to strong, on coast. Full details will be found in map above: Coonabarabran, fine, clear; rain, 0·18; maximum 84°, minimum 52°; wind, S.

Queensland.—Generally fine, with southerly and S.E. winds and calm and moderate sea. Dull at Cape Moreton. Rainfall—Brisbane, 0·98; Cape Moreton, 0·25.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S., strong wind, dusty, temperature 68°; Cape St. George, E.S.E., 40, fine, heavy sea, temperature 65°; Deniliquin, S., fine, temperature 68°; Dubbo, S.W., 14, fine, temperature 73°; Eden, S.W., 40, fine, temperature 67°; Goulburn, W., 10, fine, temperature 68°; Minendie, S. fine, temperature 78°, Moruya, N.E., 28, fine, smooth sea, temperature 65; Newcastle; S.E., 20, fine, smooth sea, temperature 67°; Wentworth, S., fine, temperature 76°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 3 inches above summer level; at Hay, 6 inches above summer level; at Balranald, 1 foot 3 inches above summer level. Murray: At Albury, 1 foot 6 inches above summer level; at Euston, 11 feet 9 inches above summer level. Darling: At Wentworth, 9 feet 3 inches above summer level; at Pooncarie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR NOVEMBER 30.

Sun rises at 4.44, sets at 6.54; Moon, 12.51 a.m., 12.25 p.m.; Mercury, 6.1 a.m., 8.37 p.m.; Venus, 8 a.m., 10.26 p.m.; Mars, 12.38 a.m., 11.48 a.m.; Jupiter, 1.29 a.m., 1.33 p.m.; Saturn, 8.54 p.m., 6.50 a.m. New moon, 8th; full moon, 22nd.

High Water at Fort Denison November 28: 1.52 a.m., 2.23 p.m.

METEOROLOGICAL REPORTS AND [illegible]

Stations	wt	Mx	9a	R'in
Albury	g	75	48	0·06
Armidale	b	80	49	0
Balranald	c	81	37	0·17
Bathurst	b	72	41	0
Bend'n'r	b	80	56	0
Bodalla ..	–	–	–	–
Bourke ..	b	92	49	0
C'md'n H.	b	77	62	0
C. St. Geo.	–	–	–	–
Carcoar ..	b	79	50	0
Casino ..	b	89	63	0
Cassilis .	b	–	–	0
Clarence	c	83	59	0
C'nd'b'lin	c	66	49	0
Cooma ..	g	66	45	0·00
Coonab'n	b	82	40	0
C'ncab'e	b	–	–	0·11
Cowra ..	b	81	–	0
Dentiq'n	u	81	44	0·37
Dubbo ..	b	80	42	0
Eden	u	69	51	0
Euston ..	g	76	51	0
Forbes ..	b	83	53	0
Gifn'ham	b	86	53	0
Gouldb'n	g	70	41	0
Grafton ..	c	87	69	0
Grenf'll	b	87	55	0
Hay	r	71	41	0·07
Hill End	b	–	–	0
Inverell ..	b	79	53	0
Kiandra	r	58	28	0·15
Kismore	c	85	63	0·04
Maitland	c	86	60	0
Marsdens	c	76	61	0
Menindie	c	73	58	0
Molong ..	b	74	47	0
Moree ..	b	88	66	0
Moruya ..	c	70	48	0·23
Moss Vale	c	69	50	0
M. Vict'ria	u	76	44	0
Nudgee ..	b	82	43	0
M'rr'mb'n	u	79	55	0
M rr'ndi	b	88	60	0
Mus'lbr'k	b	88	69	0
Narrabri	u	89	50	0
Newcastle	b	82	64	0
Nowra ..	–	–	–	–
Orange ..	b	63	39	0·1
Picton ..	c	76	55	0
P. M'q'rie	b	79	63	0
P.St'ph'ns	c	84	61	0
Queanbeyan	b	70	49	0
Quirindi	b	83	53	0
Singleton	b	85	63	0·06
SYDNEY ..	c	73	53	0·03
Tamw'rth	b	86	52	0
Taralga ..	b	79	47	0
Taree	c	90	62	0·02
Tent'rfield	b	87	3	0
Wagga ..	u	6	36	0
Walcha ..	b	71	49	0
Walgett ..	b	91	3	0
Wnt'w'rth	c	7	3	0
Wilcannia	b	–	–	0
W'll'ng'g	c	7	8	0·05
Young ..	u	7	2	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S., LONGITUDE 10h. 4m. 50·81s. E.

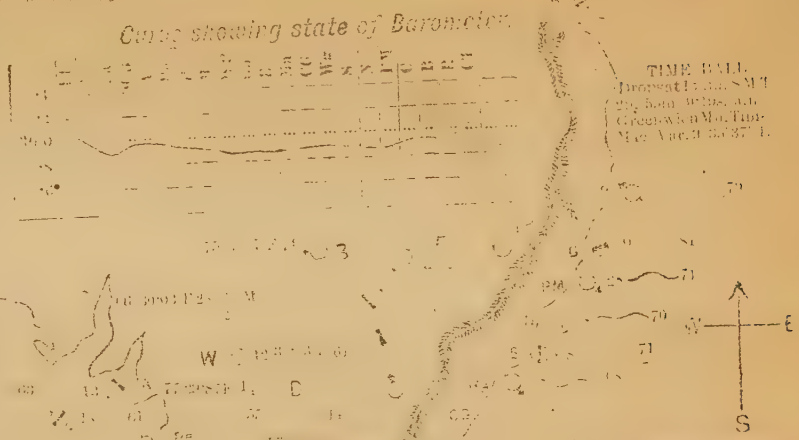
Average Annual Rainfall for 26 years [illegible]

Average for 27 years from Jan. 1st to September 30 [illegible]

Total Rainfall from January 1st to November 30 [illegible]

Barometer is corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Cloudy, wind E.
T. storm, wind S. — Rain, wind W.
If it is calm, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the first column [illegible] the state of the weather at 9 a.m.: b [illegible] g, gloomy; h, hazy; [illegible] r, rain; s, snow; t, thunder; u, [illegible] Next follows the maximum temperature for previous 24 [illegible] the minimum temperature; r in the rain for the previous 24 [illegible] are explained on the map. At each coast station [illegible] according to the direction from which the wind is [illegible] weather; a circle with bar, cloudy [illegible] placed figures denote [illegible] shows the state [illegible] The barometer [illegible] to Cooktown – 11, [illegible] P. Portland; [illegible] Mt. Murray; C. Jervis [illegible] Mt. Macquarie; C. Clarence [illegible] the state of barometer [illegible] Moreton Island and Alice [illegible] Entrance, E., 8, raining, smooth sea, temperature 64°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 5 inches above summer level; at Hay, 6 inches above summer level; at Balranald, 1 foot above summer level. Murray: At Albury, 1 foot 6 inches above summer level; at Euston, 10 feet 1 inch above summer level. Darling: At Wentworth, 8 feet 7 inches above summer level; at Pooncarie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 1.

Sun rises at 4.44, sets at 6.55; Moon, 1.29 a.m., 1.27 p.m.; Mercury, 6.2 a.m., 8.38 p.m.; Venus, 8·2 a.m., 10.26 p.m.; Mars, 12.35 a.m., 11.47 a.m.; Jupiter, 1.25 a.m., 1.29 p.m.; Saturn, 8.49 p.m., 6.45 a.m. Newmoon, 8th; full moon, 22nd.

High water at Fort Denison December 1: 2.59 a.m., 3.35 p.m.

Western Australia.—Generally cloudy, with light, variable southerly winds, rising barometers, and smooth sea; showery at Albany. Rainfall: Albany, 0·07; Esperance Bay, 0·75.

South Australia reports weather generally fine, with few scattered clouds inland; dull on and near coast; light rain recorded over Mount Lofty Ranges and in S.E.; prevailing winds S.W. to S.E., and light to fresh in force. Rainfall: Port Darwin, 0·67; Daly Waters, 0·11; Alice Springs, 0·15; Mount Gambier, 0·23; Robe, 0·02; McDonnell Bay, 0·09.

Victoria.—Generally cloudy, with light easterly and southerly winds; steady barometers; smooth sea on coast. Rainfall: Melbourne, 1·34; Portland, 0·21; Cape Otway, 0·01; Wilson's Promontory, 0·63; Lake Entrance, 0·35; Omeo, 0·02.

Tasmania.—Dull on N. coast, with light N.E. winds. Rainfall: Low Heads, 0·38.

New South Wales.—Generally fine, with light S.E. to S.W. winds and calms; cloudy in the Southern part of colony; barometer falling; smooth sea, light N.E. winds, and fine but cloudy on coast. Full details in map above. Heavy thunderstorm, with hail and rain, 10.15 a.m. until 2 p.m. 30th.

Queensland. Generally cloudy, with N.W. to N. winds and calms; sea smooth. Rainfall: Brisbane, 0·01; Rockhampton, 0·02; Cape Moreton, 0·58.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., dull, temperature 64°; Carcoar, N.E., fine, smooth sea, temperature 78°; Dentiquin, S.W., [illegible] temperature 72°; Dubbo, W.N.W., 8, fine, temperature 7[illegible]; Eden, N.E., 14, thunderstorm and heavy rain, smooth sea, temperature 67°; Goulburn, N.W., dull, temperature 6[illegible]°; Minindie, S., fine, temperature 72°; Newcastle, N.E., 8, fine, smooth sea, temperature 72°; Sydney, S.E., scattered clouds, smooth sea, temperature 70°; Wentworth, W., fine, temperature 68°.

Thunderstorm, with hail and heavy rain, at Sydney at 11 a.m.; several showers afterwards; rain up to 9 p.m., 0·793. At the Observatory there was not much hail, not enough to make the ground white; but at the North Shore and the high land East of the city the hail was heavy, and some pieces as large as a half-crown piece fell.

Victoria.—Melbourne, S.S.W., 18, fine, temperature 63°; Portland, S.E., 13, cloudy, smooth sea, temperature 64°; Wilson's Promontory, E., 18, cloudy, slight sea, temperature 66; Lake Entrance, E., 8, raining, smooth sea, temperature 64°.

Stations	wt	Mx	Mn	R'fall
Albury	b	71	43	0·03
Armidale	b	81	54	0
Balranald	b	84	43	0
Bathurst	b	74	41	0
Bend'm'r	b	80	56	0
Bodalla	c	71	43	0·05
Bourke	b	93	54	0
C'md'n H.	b	74	63	0
C.St.Geo.	b	73	62	1·01
Carcoar	b	69	46	0·11
Casino	b	92	54	0
Cassilis	b	—	55	0
Clarence	b	89	62	0
C'nd'b'lin	b	66	40	0
Cooma	u	71	30	0·06
Coolab'n	b	81	45	0
C'nam'ble	b	—	—	0
Cowra	b	76	43	0
Deniliq'n	b	77	50	0
Dubbo	b	83	45	0
Eden	u	68	51	0·[illegible]
Euston	b	82	52	0
Forbes	b	74	47	0
G'fn Ind's	c	85	57	0
Goulburn	b	74	43	0
Grafton	b	91	67	0
Gunned'h	b	86	61	0
Hay	b	77	41	0·05
Hill End	b	—	—	0
Inverell	b	82	50	0
Kiandra	c	58	25	0·18
Lismore	b	91	65	0
Maitland	b	81	55	0
Marsdens	b	75	57	0
Menindie	—	—	—	—
Molong	b	81	46	0
Moree	b	77	58	0
Moruya	b	72	49	0·52
Moss Vale	c	70	46	0·10
M. Vict'ria	b	70	43	0
Mudgee	b	80	43	0
M'rr'mb'h	b	70	47	0·02
M'rr'rndi	b	81	55	0
Mus'ibr'k	b	94	54	0
Narrabri	b	93	54	0
Newcastle	b	76	57	0·15
Nowra	—	—	—	—
Orange	c	71	41	0
Picton	b	75	49	0·22
P. M'q'rie	b	83	57	0
P.St'ph'ns	b	82	55	0·19
Q'nbeyan	b	67	45	0
Quirindi	b	84	52	0
Singleton	b	87	62	0
Sydney	b	73	57	0·80
Tamw'rth	b	83	47	0
Taralga	b	73	47	0
Taree	b	90	59	0
T'nt'rfield	b	84	47	0
Wagga	b	67	56	0·19
Walcha	b	76	46	0
Walgett	b	88	56	0
W'tw'rth	b	82	54	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	52	0
Young	b	70	41	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. [illegible]

Average Annual Rainfall for 20 years [illegible]
Average for 27 years from Jan. 1st to November [illegible]
Total Rainfall from January 1st to December [illegible]
Barometer is corrected to 32° Fah., and 35 [illegible]

Line of wind N. Cloudy wind E.
E. storm wind S. Rain, wind W.
If it is calm, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.

TIME BALL.
Drops at 1 p.m. [illegible] Greenwich Mn Time.
Mag. Var. 9° 35′ E.

CLOUDY GENERALLY

Rain, 0·18 in. [illegible] about 0·07 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF M. F.

[illegible]

Western Australia.—Generally fine and clear, with light S.E. and E. winds, and smooth sea. No rain.

South Australia reports weather generally fine and cool inland, with scattered clouds on and near coast; prevailing winds S.W. to S.E., and light to fresh; smooth sea, and rising barometers on coast. Rainfall: Alice Springs, 0·11; Daly Waters, 0·14; Tennant's Creek, 0·05; Robe, 0·04; and M'Donnell Bay, 0·01.

Victoria.—Generally cloudy, with light to fresh S.W. winds, and rising barometers; W. and S.W. winds, and smooth sea on coast. Rainfall: Portland, 0·03; Lake Entrance, 0·02.

Tasmania.—Fine on N. coast, with light W.N.W. wind. No rain.

New Zealand.—Russell, barometer 30·10, wind calm, fine; Wellington, barometer 29·90, wind S., fine; Hatii, barometer 30·10, wind S.W., dull, showery.

New South Wales.—Generally fine and clear, with light variable winds; smooth sea, southerly winds, steady barometer, and very clear weather on coast; Camden reports: weather fine, rain 0·35. Full details in notes above.

Queensland.—Generally fine and clear, northerly to S.W. winds and moderate sea on coast. Rainfall: Brisbane, 0·16; Cape Moreton, 0·03.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, temperature 70°; Cape St. George, S., 56, fine, smooth sea, temperature 1[illegible]; Clarence River, fine, smooth sea, temperature 80; Deniliq'n, S., dull, temperature 74; Dubbo, S., fine, temperature 78; Eden, S.W., 14, fine, smooth sea, temperature 68°; Menindie, calm, fine, temperature 74°; Moruya, S., 18, scattered clouds, smooth sea, temperature 67°; Newcastle, S.E., fine, smooth sea, temperature [illegible]; Port Macquarie, S.E., fine, smooth sea, temperature 69; Sydney, S.E., 18, scattered clouds, smooth sea, temperature 67°; Wentworth, S.W., dull, temperature 77°.

Victoria.—Melbourne, S., 12, fine, temperature 66°, barometers steady; Cape Otway, W., 6, cloudy, smooth sea, temperature 62°; Portland, S.W., 30, fine, smooth sea, temperature 64°; Wilson's Promontory, S.W., 12, fine, smooth sea, temperature 70°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 8 inches above summer level; at Hay, 6 inches above summer level; at Balranald, 1 foot above summer level. Murray: At Albury, 1 foot 10 inches above summer level; at Euston, 10 feet 2 inches above summer level. Darling: At Wentworth, [illegible] above summer level; at Poonaric, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 2.

Sun rises at 4.44, sets at 6.56; Moon, [illegible] a.m., 2.27 p.m.; Mercury, 6.2 a.m., 8.37 p.m.; Venus, 8·4 a.m., 10.26 p.m.; Mars, 12.32 a.m., 11.45 a.m.; Jupiter, 1.22 a.m., 1.26 p.m.; Saturn, 8.46 p.m., 6.42 a.m. New moon, 6th; full moon, 22nd. High water at Fort Denison December 2: 4.11 a.m. 4.47 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 2, 1885.

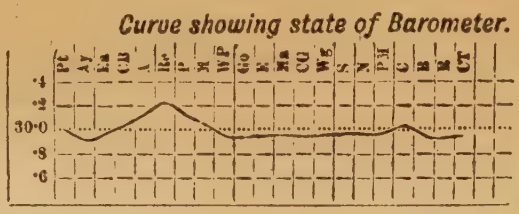
Stations	W.T.	M'x	M'n	R'in
Albury	b	81	53	0
Armidale	b	81	55	0
Balranald	b	89	48	0
Bathurst	b	73	49	0
Bend'm'r	b	80	42	0
Bodalla ..	b	77	48	0
Bourke ..	b	96	61	0
C'md'n H.	b	79	61	0
C. St. Geo.	b	88	52	0
Carcoar ..	b	72	56	0
Casino ..	c	99	66	0
Cassilis ..	b	—	61	0
Clarence	b	93	62	0
C'nd'b'lin	b	60	41	0
Cooma ..	c	71	47	0·12
Coonab'n	b	85	47	0
C'nam ble	b	—	—	0
Cowra ..	b	72	66	0
Deniliq'n	b	84	52	0
Dubbo ..	b	86	51	0
Eden	b	71	52	0·03
Euston ..	b	86	55	0
Forbes ..	b	75	46	0
Gl'n Inn's	b	87	56	0
Goulburn	b	76	42	0
Grafton ..	b	100	63	0
Gunned'h	b	89	63	0
Hay	b	85	54	0
Hill End	b	—	—	0
Inverell ..	b	73	52	0
Kiandra	n	65	29	0
Lismore	c	—	71	0
Maitland	b	86	60	0
Marsdens	b	80	62	0
Menindie	b	82	64	0
Molong ..	b	83	51	0
Moree ..	b	89	58	0
Moruya ..	c	72	55	0
Moss Vale	b	70	45	0
M. Vict'ria	c	69	47	0
Mudgee ..	b	84	43	0
M'rr'mb'h	c	76	55	0
M rr'r'ndi	b	82	57	0
Mus'lbr'k	b	94	56	0
Narrabri	b	99	76	0
Newcastle	b	72	60	0
Nowra ..	b	75	52	0·25
Orange ..	c	71	45	0
Picton ..	b	74	49	0·05
P. M'q'rie	b	68	55	0
P.St'ph'ns	c	78	54	0
Q'nbeyan	b	74	50	0·40
Quirindi	b	85	51	0
Singleton	b	87	61	0
SYDNEY ..	b	73	57	0
Tamw'rth	—	—	—	—
Taralga ..	b	79	42	0
Taree	c	85	59	0
T'nt'rfield	b	86	50	0
Wagga ..	b	82	46	0
Walcha ..	b	75	49	0
Walgett ..	b	91	57	0
W'ntw'rth	b	83	56	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	52	0
Young ..	u	83	53	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 2.. 36·722
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E
T. storm, wind S. Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla, CB Cape Borda, A. Adelaide, Re, Robe, P, Portland; M, Melbourne; W.P. Wilson's Promontory, Go, Gabo; E, Eden, Ma, Moruya; C G Jervis Bay, Wg, Wollongong, S, Sydney, N, Newcastle, P M Port Macquarie; C, Clarence River, B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury Deniliquin Wentworth Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light S.E. to S.W. winds, and smooth sea. No rain.

South Australia reports scattered clouds over parts of coast and the Mount Lofty Ranges; fine and clear inland; prevailing winds light from S.W. to S.E., and calm; smooth sea, light S.E. winds, and rising barometers on coast; calm with steady barometer at Adelaide. Rainfall: Port Darwin, 0·04; Robe, 0·02; M'Donnell Bay, 0·02.

Victoria.—Generally cloudy, with S.W. winds and rising barometers; light rain falling in places on coast, with moderate sea running. Rainfall: Melbourne, 0·04; Portland, 0·06; Cape Otway, 0·02.

Tasmania.—Fine and clear on N. coast, with light W.N.W. wind.

New Zealand.—Russell, barometer 30·00, wind N.E., dull; Wellington, barometer 29·90, wind S.E., fine; Bluff, borometer 30·00, wind S.E., dull.

New South Wales.—Generally fine and clear throughout, with light S.E. to S.W. winds and calms; smooth sea, light variable winds, and rising baromerers on coast. Rain measured at a few stations only, the heaviest being 0·40 at Queanbeyan. Full details will be found in map above.

Queensland.— Fine generally on east coast, with S.E. winds and calms and moderate sea. Rainfall: Townsville, 0·22.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 12, cloudy, temperature 62°, Cape Otway, W.S.W., 6, misty, rough sea, temperature 58°; Portland, S.S.W., 18, cloudy, smooth sea, temperature 62°; Wilson's Promontory, W., 24, squally, misty, smooth sea, temperature 60° Lake Entrance, S.E., 6, cloudy, smooth sea, temperature 60°.

New South Wales.—Albury, S.W., fresh, fine, temperature 74°; Cape St. George, N.E., 14, fine, temperature 73°; Clarence River, S.E., fine, smooth sea, temperature 80°; Deniliquin, S., fine, temperature 77°; Dubbo, S., fine, temperature 78°; Eden, E., 28, fine, slight sea, temperature 70°; Goulburn, N.W., 14, fine, temperature 69°; Menindie, S.E., fine, temperature 80°; Moruya, E., 28, fine, smooth sea, temperature 60°; Newcastle, S. fine, smooth sea, temperature 68°; Port Macquarie, E., 14, fine, smooth sea, temperature 79°; Sydney, E., 8, fine, smooth sea, temperature 70°; Wentworth, calm, fine, temperature 74°; Walgett, S.W., fine, temperature 91°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 8 inches above summer level; at Hay, summer level; at Balranald, 8 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level; at Euston, 9 feet 6 inches above summer level. Darling: At Wentworth, 8 feet 3 inches above summer level; at Pooncarie, Menindie, and Wilcannia, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 3.

Sun rises at 4.45, sets at 6.56; Moon, 2.43 a.m., 3.27 p.m.; Mercury, 6.2 a.m., 8.36 p.m.; Venus, 8.5 a.m., 10.25 p.m.; Mars, 12.30 a.m., 11.43 a.m.; Jupiter, 1.19 a.m., 1.23 p.m.; Saturn, 8.42 p.m., 6.38 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 3: 5.21 a.m., 5.54 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 3, 1885.

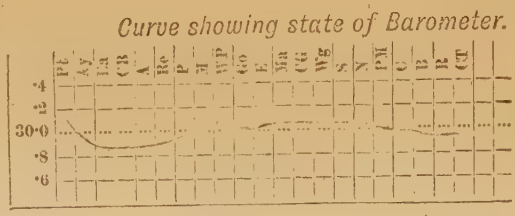
Stations	wt	Mx	Mn	R'in
Albury	b	84	55	0
Armidale	b	85	57	0
Balranald	b	96	46	0
Bathurst	b	79	50	0
Bend'm'r	b	85	56	0
Bodalla	b	77	52	0
Bourke	b	97	66	0
C'md'n H.	u	78	61	0
C. St. Geo.	c	75	56	0
Carcoar	b	75	53	0
Casino	c	[illegible]	64	0
Cassilis	g	—	65	0
Clarence	c	93	62	0
C'nd'b'lin	b	71	52	0
Cooma	b	78	47	0·17
Coonab'n	b	93	49	0
C'namble	b	—	—	0
Cowra	b	78	51	0
Deniliq'n	b	84	50	0
Dubbo	b	91	54	0
Eden	c	76	57	0
Euston	b	89	55	0
Forbes	b	80	59	0
Gl'n Inn's	b	81	59	0
Goulburn	b	79	53	0
Grafton	c	93	[illegible]	0
Gunned'h	-	—	—	—
Hay	b	81	53	0
Hill End	b	—	—	0
Inverell	b	85	58	0
Kiandra	b	67	42	0
Lismore	g	90	63	0
Maitland	u	86	65	0
Marsdens	b	86	66	0
Menindie	b	83	65	0
Molong	b	86	55	0
Moree	b	94	63	0
Moruya	c	75	59	0
Moss Vale	u	74	54	0
Mt. Hope	b	81	65	0
M. Vict'ria	g	74	52	0
Mudgee	b	83	54	0
M'rr'mb'h	b	83	6	0
M'r'r'ndi	u	82	62	0
Mus'lbr'k	g	93	6[illegible]	0
Narrabri	b	96	62	0
New'c'stle	c	76	[illegible]	0
Nowra	—	—	—	—
Orange	b	76	48	0
Picton	b	[illegible]	5[illegible]	0
P. M'q'rie	b	81	61	0
P.St'ph'ns	c	78	5	0
Q'nbeyan	b	74	56	0·04
Quirindi	b	87	58	0
Singleton	b	85	06	0
SYDNEY	c	72	63	0
Tam'w'rth	—	—	—	—
Tenterfield	g	78	50	0
Taree	g	82	64	0
T'nt'rfield	b	98	53	0
Wagga	b	88	5[illegible]	0
Walcha	b	8[illegible]	50	0
Walgett	b	9[illegible]		0
W'ntw'th	b	86	[illegible]	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	80	61	0
Young	b	87	42	0

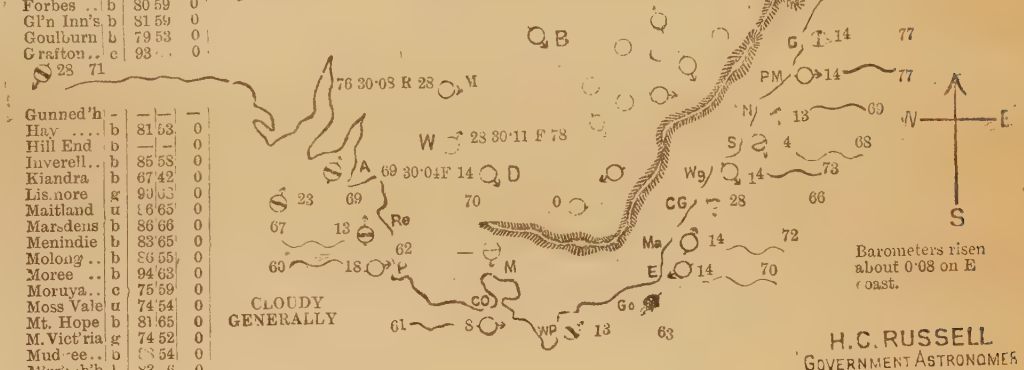
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 16h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 3.. 26·722
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.





H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W.P. Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with fresh S.W. to S.E. winds, and smooth sea. Rainfall: Esperance Bay, 0·02.

South Australia reports weather generally hot and sultry, with scattered clouds. Dull in places. Prevailing winds: N.E. to N., and fresh. Rainfall: Daly Waters, 0·11; Port Augusta, 0·02; Eucla, 0·02 (thunderstorm in night). Smooth and moderate sea. Northerly wind, and falling barometers on coast.

Victoria.—Generally fine. Smooth sea, falling barometers, light variable winds, and cloudy in places on coast. Fine inland at Echuca and Omeo, with light S. wind and calm. Rainfall: Portland, 0·02.

Tasmania.—Dull on N. coast, with light N. wind.

New Zealand.—Russell, barometer 30·00, wind N., fine; Wellington, barometer 29·80, wind S., raining; Bluff, barometer 29·80, wind E., fine.

New South Wales.—Generally fine and clear, with light S.E. to S.W. winds and calms; cloudy in places on coast; sea smooth, barometers rising on coast. No rain. Full details in map above.

Queensland.—Generally fine, with light variable winds and calms and moderate sea. Rainfall: Rockhampton, 0·11.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, E.N.E., 8, fine, temperature 79°, Cape Otway, E., 13, half cloudy, rather rough sea, temperature 68°; Portland, E.S.E., 18, cloudy, smooth sea, temperature 68°; Wilson's Promontory, N.E., 23, fine, sultry, smooth sea, temperature 68°; Lake Entrance, N.E., 8, cloudy, smooth sea, temperature 66°.

New South Wales.—Albury, E., fine, warm, temperature 78°; Cape St. George, S.E., 28, fine, smooth sea, temperature 68°; Deniliquin, calm, fine, temperature 82°; Dubbo, calm, fine, temperature 80°; Eden, E.S.E., 28, fine, light sea, temperature 64°; Goulburn, E.N.E., 14, fine, temperature 70°; Menindie, calm, fine, hot, temperature 81°; Moruya, E.N.E., 42, fine, smooth sea, temperature 65°; Newcastle, S.E., 14, fine, smooth sea, temperature 70°; Port Macquarie, S.E., fine, smooth sea, temperature 80°; Sydney, E.S.E., 8, scattered clouds, smooth sea, temperature 69°; Wentworth, N.W., fine, temperature 80°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 7 inches above summer level; at Hay, below summer level; at Balranald: 8 inches above summer level. Murray: At Albury, 1 foot 8 inches above summer level. Darling: At Wentworth, 9 feet above summer level; at Pooncarie, 7 feet 11 inches above summer level; at Menindie, Wilcannia, and Bourke, low.

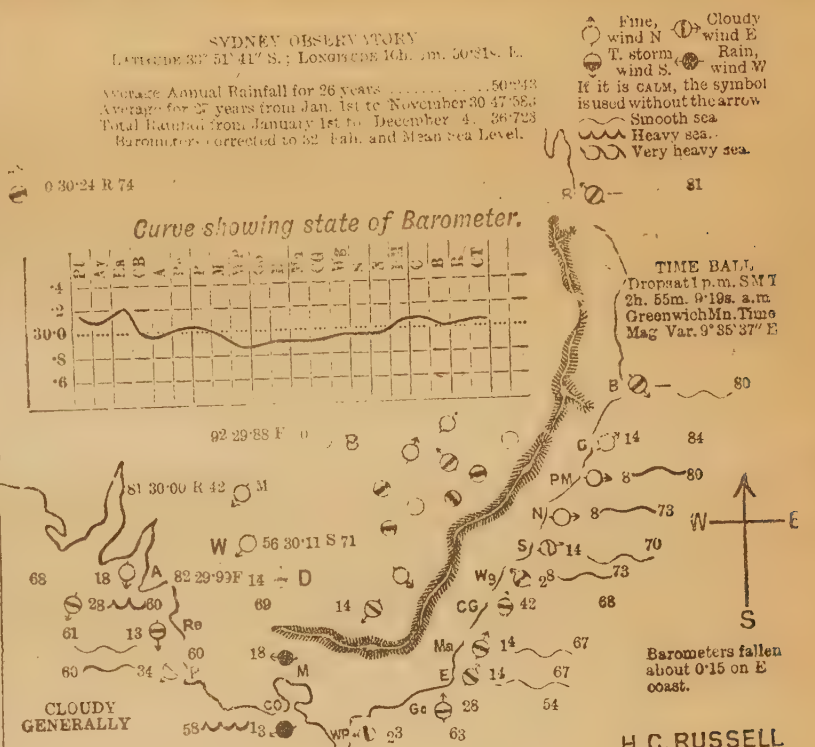
ASTRONOMICAL MEMORANDA FOR DECEMBER 4.

Sun rises at 4.44, sets at 6.57; Moon, 3.21 a.m., 4.25 p.m.; Mercury, 6.3 a.m., 8.36 p.m.; Venus, 8.7 a.m., 10.25 p.m.; Mars, 12.27 a.m., 11.41 a.m.; Jupiter, 1.15 a.m., 1.19 p.m.; Saturn, 8.39 p.m., 6.35 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 4: 6.21 a.m., 6.47 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 4, 1885.

Stations	W.T.	M'x	M'n	R'in
Albury	u	91	61	0
Armidale	b	86	59	0
Balranald	c	103	61	0
Bathurst	b	86	54	0
Bend'm'r	b	87	55	0
Bodalla	–	–	–	—
Bourke	b	104	64	0
C'md'n H.	c	76	63	0
C. St. Geo.	c	72	60	0
Carcoar	b	75	61	0
Casino	b	94	66	0
Cassilis	b	—	64	0
Clarence	c	90	62	0
C'nd'b'lin	g	75	51	0
Cooma	c	82	49	0
Coonab'n	c	94	51	0
C'nam'ble	u	—	—	0
Cowra	u	80	74	0
Deniliq'n	c	96	60	0
Dubbo	b	97	61	0
Eden	c	75	60	0
Euston	c	101	68	0
Forbes	b	89	64	0
Gl'n Inn's	b	95	60	0
Goulburn	b	85	53	0
Grafton	b	94	70	0
Gunned'h	b	96	69	0
Hay	g	97	61	0
Hill End	b	—	—	0
Inverell	b	86	58	0
Kiandra	c	71	39	0
Lismore	c	90	72	0
Maitland	b	84	60	0
Marsdens	c	90	66	0
Menindie	b	92	73	0
Molong	b	92	59	0
Moree	c	99	69	0
Moruya	g	77	57	0
Moss Vale	c	72	55	0
Mt. Hope	g	89	63	0
M. Vict'ria	c	79	51	0
Mudgee	b	91	55	0
M'rr'mb'h	c	88	57	0
M'rr'r'ndi	b	83	52	0
Mus'lb'r'k	b	94	56	0
Narrabri	b	99	62	0
Newcastle	b	76	65	0
Nowra	–	—	—	—
Orange	c	82	54	0
Picton	c	78	59	0
P. M'q'rie	b	82	58	0
P.St'ph'ns	c	81	57	0
Q'nbeyan	b	76	60	0
Quirindi	b	89	61	0
Singleton	b	82	66	0
SYDNEY	g	72	59	0
Tamw'rth	b	92	66	0
Taralga	g	83	52	0
Taree	c	84	62	0·01
T'nt'rfield	–	—	—	—
Wagga	g	92	61	0
Walcha	b	82	56	0
Walgett	c	98	66	0
W'ntw'rth	c	98	66	0
Wilcannia	b	—	—	0
W'll'ng'ng	g	76	59	0
Young	g	91	59	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth, Ay. Albany, Ea. Eucla, CB. Cape Borda, A. Adelaide; Re. Robe; P. Portland; M. Melbourne, W.P. Wilson's Promontory, Go. Gabo; E. Eden; Ma. Moruya; C.G. Jervis Bay, Wg. Wollongong; S. Sydney; N. Newcastle, P.M. Port Macquarie; C. Clarence River, B. Brisbane; R. Rockhampton; Ct. Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light S.E. to S.W. winds and smooth sea; no rain.

South Australia reports weather generally fine and cool, with scattered clouds. Dull between Gladstone and Barrow's Creek. Thunderstorms in night over Kangaroo Island, prevailing winds fresh, and from S.W. to S. Steady barometer on coast. Rough sea at Cape Borda. Rainfall: Alice Springs, 0·04; Cape Borda, 0·18; M'Donnell Bay, 0·07.

Victoria.—Generally cloudy and dull. Fresh W. winds, rising barometer, and showery in places on coast. Rough sea at Cape Otway. Cloudy inland at Echuca and Omeo, with W.N.W. and N. winds. Rainfall: Melbourne, 0·04; Portland, 0·08; Cape Otway, 0·10.

Tasmania.—Light rain falling on N. coast, with fresh N.E. winds.

New Zealand.—Russell, bar. 29·80, calm, dull, thunderstorms in night; Wellington, bar. 29·90, wind S.E., showery; Bluff, bar. 30·00, wind E., fine.

New South Wales.—Generally fine, but cloudy. Dull in places on coast, and in E. of colony. Prevailing winds, N.E. and S.E., and calm. Smooth sea, falling barometers, and N. and N.E. winds on coast. Full details in map above.

Queensland.—Generally cloudy in S., with light N.W. winds and moderate sea. Fine at Townsville, with S.E. wind and smooth sea. Rainfall: Cape Moreton, 0·03; Rockhampton, 0·05.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 18, fine, temperature 63°; Cape Otway, W.S.W., rough sea, temperature 60°; Portland, S.W., 24, misty, moderate sea, temperature 65°; Wilson's Promontory, S.W., 24, squally, like rain, moderate sea, temperature 67°.

New South Wales.—Albury, E., cloudy, close, temperature 80°. Cape St. George, N., 42, cloudy, moderate sea, temperature 70°; Clarence River, E.N.E., 28, fine, smooth sea, temperature 75°; Deniliquin, S., 14, fine, hot, temperature 84°; Dubbo, W., 14, fine, temperature 83°; Eden, N.E., 14, dull, slight sea, temperature 70°; Goulburn, W., 14, fine, temperature 72°; Menindie, S.W., 42, fine, temperature 84°; Moruya, N.E., 42, dull, moderate sea, temperature 72°; Newcastle, N.E., 8, fine, smooth sea, temperature 73°; Port Macquarie, N., 42, fine, smooth sea, temperature 80°; Sydney, E.N.E., 18, scattered clouds, smooth sea, temperature 82°; Wentworth, W., 28, fine, temperature 75°; Walgett, calm, fine, hot, temperature 95°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet above summer level; at Hay, summer level; at Balranald, 8 inches above summer level. Murray: At Albury, 1 foot 7 inches above summer level. Darling: At Wentworth, 7 feet 7 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

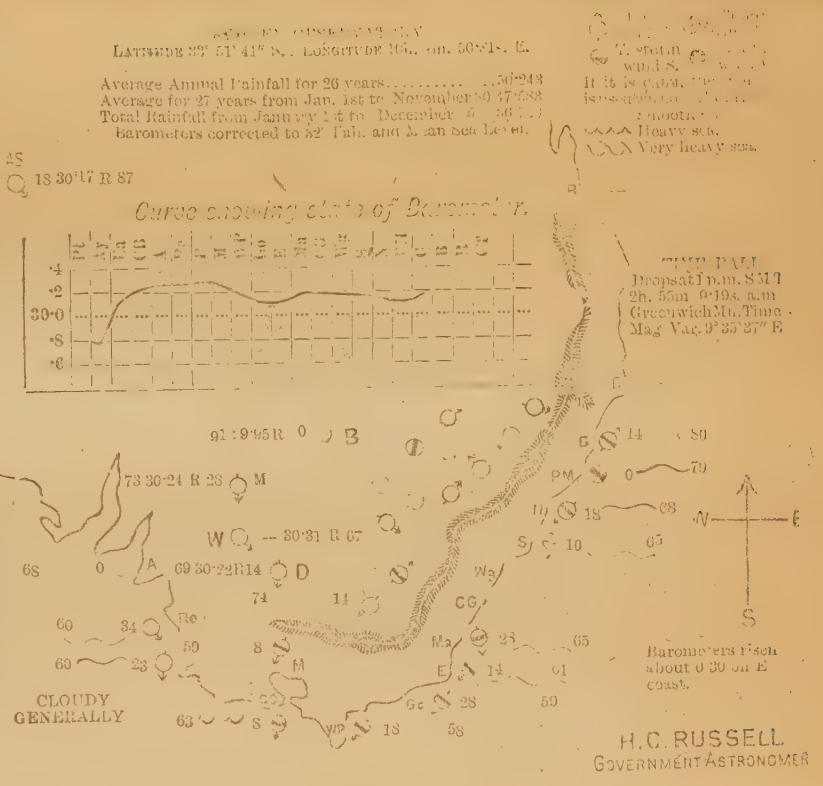
ASTRONOMICAL MEMORANDA FOR DECEMBER 5.

Sun rises at 4.44, sets at 6.58; Moon, 4.1 a.m., 5.21 p.m.; Mercury, 6.3 a.m., 8.35 p.m.; Venus, 8.8 a.m., 10.24 p.m.; Mars, 12.25 a.m., 11.39 a.m.; Jupiter, 1.12 a.m., 1.16 p.m.; Saturn, 8.35 p.m., 6.31 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 5: 7.10 a.m., 7.33 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 5, 1885.

Stations.		Max.	Min.	Rain.
Albury	b	93	53	0
Armidale	b	90	65	0
Balranald	o	95	44	0
Bathurst	b	88	61	0
Bend'n'r	b	90	60	0
Bodalla ..	—	—	—	—
Bourke ..	b	110	74	0
C'md'n H.	c	80	64	0
C. St. Geo.	c	—	—	0
Carcoar ..	b	73	64	0
Casino ..	c	[illegible]	[illegible]	0
Cassilis ..	o	—	67	0
Clarence	c	86	65	0
C'nd'b'lin	b	78	50	0
Cooma ..	g	83	53	0
Coonab'n	b	99	56	0
C'nam'ble	b	—	—	0
Cowra ..	b	83	76	0
Deniliq'n	b	91	44	0
Dubbo ..	b	97	60	0
Eden	c	72	57	0·02
Euston ..	b	92	52	0
Forbes ..	b	91	59	0
Gl'n Inn's	b	95	59	0
Goulburn	g	88	55	0
Grafton ..	c	93	73	0
Gulgong	b	88	63	0
Gunned'h	b	101	72	0
Hay	b	99	51	0
Hill End	b	—	—	0
Inverell ..	b	91	58	0
Kiandra	b	74	47	0
Lismore	c	92	71	0
Maitland	u	91	70	0
Marsdens	b	95	68	0
Menindie	b	88	65	0
Molong ..	b	—	—	0
Morce ..	b	99	76	0
Moruya ..	g	77	61	0
Moss Vale	u	83	53	0
Mt. Hope	b	94	71	0
M. Vict'ria	g	84	54	0
Mudgee ..	b	91	59	0
M'rr'mb'h	c	92	65	0
M'rr'b'ndi	c	86	65	0
Mus'br'k	c	103	66	0
Narrabri	b	107	73	0
Newcastle	q	76	67	0
Nowra ..	b	—	—	0
Orange ..	b	84	57	0
Picton ..	g	84	63	0
P. M'q'rie	c	84	66	0
P.St'ph'ns	g	85	59	0
Q'nbeyan	c	79	60	0
Quirindi	c	91	62	0
Singleton	u	90	71	0
SYDNEY ..	g	74	65	0
Tamw'rth	c	96	70	0
Taralga ..	d	99	55	0
Taree	c	84	64	0
T'nt'rfield	c	94	65	0
Wagga ..	b	76	58	0
Walcha ..	c	85	60	0
Walgett ..	b	104	70	0
W'ntw'rth	b	85	56	0
Wilcannia	b	—	—	0
W'll'ng'ng	c	—	—	0
Young ..	b	97	61	0



NOTES EXPLANATORY OF MAP

In the list of stations the column headed W[illegible] standing for blue sky; c, detached clouds; [illegible] m, misty; m, frosty; o, overcast; p, [illegible] threatening. The next column, M'x gives the maximum temperature [illegible] hours. M'n the corresponding minimum temperature; [illegible] hours. The symbols used in the map are [illegible] the wind symbol is placed like a vane pointing to the [illegible] coming. A clear circle with it means fine [illegible] weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown. — Ft. Perth, Av. Albany, Fa. Eucla, CE. Cape Borda, A. Mount de Ioc, Rcha. P. Portland; M. Melbourne, W.P. Wilson's Promontory, Gc. Gabo, E. Tuck, Na. N[illegible] Bay, Wg. Wollongong, S. Sydney, N. Newcastle, P.M. Port Macquarie; C. Clarence River, B. Brisbane, R. Rockhampton, C. Cooktown. Below the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Morce, Bourke, and Alice Springs. The barometer curve troubles one at a glance to trace the depressions, beginning with Western Australia and passing eastwards, bothers which precedes them and southerly following.

Western Australia.—Generally fine and clear, with light N.E. to S.E. winds and smooth sea; no rain; heavy dew in night at Ashburton.

South Australia reports weather generally fine and clear; prevailing winds S.E. to E., and from light to fresh. Steady barometer, light S.E. and S.W. winds and calms, and smooth sea on coast; fine in Northern Territory, with S.E. winds and calms. No rain.

Victoria.—Cloudy, with light southerly and S.W. winds, rising barometers, and moderate sea on coast; rough sea at C. Otway; fine inland at Echuca, with fresh S.W. wind. Rainfall: Melbourne, 0·04; Wilson's, 0·03; and Lake Entrance, 0.01.

Tasmania.—Fine and clear on N. coast, with fresh W. wind. Rainfall: Low Heads, 0·01.

New Zealand.—Russell, bar. 29·00, wind S.E. light; Wellington, bar. 30·10, wind S.E., light; Bluff, bar. 30·00, wind S.W., 28 miles. Weather generally fine.

New South Wales.—Generally fine inland, cloudy on coast, with fresh S.S.E. to S.S.W. winds, rising barometers, and moderate sea, light S.E. to S.W. winds and calms, and rising barometers inland. Full details in map above.

Queensland.—Brisbane, N.W., fine, clear, 80°, barometer 30·06; Rockhampton, N.N.E., fine, 81°, barometer 30·06; Townsville, calm, fine, smooth, 90°, barometer 29·76; Cooktown, calm, overcast, 98°, calm sea, barometer 30·05.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, W., fine, hot, temperature 80°; Cape St. George, S.S.W., 20, cloudy, smooth sea, temperature [illegible]; Deniliquin, S.W., fine, temperature 79°; Dubbo, W., 20, fine, hazy, temperature 86°; Eden, S.E., 14, fine, slight sea, temperature 68°; Goulburn, E.N.E., 10, fine, temperature 69°; Menindie, S., 28, fine, temperature 79°; Moruya, S.E., 28, cloudy, smooth sea, temperature 68°; Newcastle, S.W., 30, cloudy, moderate sea, temperature 71°; Port Macquarie, N.E., 14, sultry, smooth sea, temperature 83°; Sydney, S., 14, cloudy, temperature 81°; Wentworth, calm, fine, clear, temperature 73°.

STATE OF RIVERS.

[illegible] feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER.

Sun rises at 4.44, sets at 7; Moon, 5.29 a.m., 7.9 p.m.; Mercury, 6.1 a.m., 8.34 p.m.; Venus, 8.11 a.m., 10.23 p.m.; Mars, 12.19 a.m., 11.35 a.m.; Jupiter, 1.5 a.m., 1.9 p.m.; Saturn, 8.28 p.m., 6.34 a.m. New moon, 6th; full moon, 22nd.

High water at Port Denison, December 7: 8.34 a.m., 8.54 p.m.

METEOROLOGICAL ABSTRACT, NOVEMBER, 1885, with results for same month during the preceding 26 years.

—	Barometer at 32° Fah. and mn. sea lev'l.	Temperature in Shade. Mean Max.	Mean Min.	Mean.	Rainfall. Amount. Inches.	No. of days.
Nov., 1885 ...	30·050	74·1	59·3	66·7	1·013	10
Average for 27 years ...	29·969	73·9	58·9	66·4	3·086	12
Monthly Extremes:						
Highest ...	30·183	78·9	61·4	69·4	9·880	21
Year	1869	1867	1872	1867	1865	1873
Lowest ...	29·794	69·0	55·9	62·9	0·200	2
Year ...	1876	1873	1861	1873	1867	1867

Wind.—November, 1885: Prevailing direction, N.E.; average prevailing direction for 27 years for same month, S.; mean miles per hour, 10·8.

Temperature.—November, 1885: Highest shade temperature, 97·6, on the 5th; highest shade temperature in any November since 1859, 102·7, on the 21st, 1878; lowest shade temperature, 52·4, on the 12th; lowest shade temperature in any November since 1859, 46·2, on the 27th, 1864.

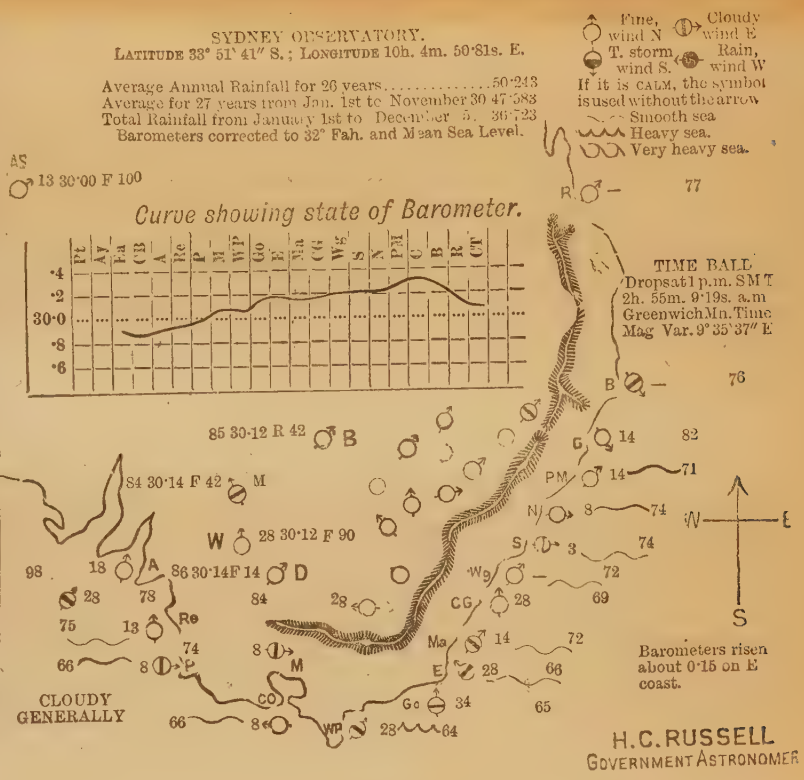
Rainfall.—November, 1885: Greatest fall in one day, 0·500, on the 7th; greatest fall in one day in any November since 1859,

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 7, 1889.

Stations	W.T.	M'x	M'n	R'in
Albury	b	97	61	0
Armidale	b	89	56	0
Balranald	b	106	48	0
Bathurst	b	91	57	0·13
Bend'm'r	b	89	56	0
Bodalla ..	c	75	58	0·07
Bourke ..	b	109	78	0
C'md'n H.	b	83	66	0
C. St. Geo.	c	72	62	0
Carcoar ..	b	83	61	0
Casino ..	c	88	61	0·73
Cassilis .	b	—	69	0
Clarence	c	90	66	0
C'nd'b'lin	b	85	59	0
Cooma ..	c	86	58	0
Coonab'n	b	101	62	0
C'nam ble	b	--	--	0
Cowra ..	b	90	79	0
Deniliq'n	b	103	44	0
Dubbo ..	b	101	68	0
Eden	u	—	62	0
Euston ..	c	103	54	0
Forbes ..	b	103	67	0
Gl'n Inn's	c	88	60	0
Goulburn	b	81	59	0
Grafton ..	c	93	69	0
Gulgong	b	85	71	0
Gunned'h	b	85	76	0
Hay	b	102	54	0
Hill End	b	—	—	0
Inverell ..	b	91	62	0
Kiandra	b	80	47	0
Lismore	c	85	66	0
Maitland	b	91	60	1·03
Marsdens	b	100	78	0
Menindie	b	98	69	0
Molong ..	b	92	66	0
Moree ..	b	95	70	0
Moruya ..	c	75	62	0·03
Moss Vale	c	72	60	0
Mt. Hope	b	98	68	0
M. Vict'ria	c	78	50	0·02
Mudgee ..	b	95	59	0
M'rr'mb'h	b	93	62	0
M'rr'r'ndi	b	86	60	0
Mus'lb r'k	b	96	66	0
Narrabri	b	98	68	0·32
Newcastle	b	77	66	0
Nowra ..	c	71	61	0·19
Orange ..	b	97	60	0
Picton ..	b	74	64	0
P. M'q'rie	b	89	60	0
P.St'ph'ns	b	85	65	0
Q'nbeyan	g	77	58	0
Quirindi	b	96	64	0
Singleton	b	84	68	0
SYDNEY ..	c	75	64	0
Tamw'rth	b	95	64	0
Taralga ..	b	81	56	0
Taree	b	86	64	0
T'nt'rfield	u	88	57	0·27
Wagga ..	b	80	67	0
Walcha ..	b	89	43	0
Walgett ..	b	103	75	0
W'ntw'rth	b	98	62	0
Wilcannia	b	--	--	0
W'll'ng'ng	b	76	63	0·06
Young ..	b	98	58	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 5. 36·723
Barometers corrected to 32° Fah. and Mean Sea Level.



H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay, Albany; Ea, Eucla, CB, Cape Borda, A, Adelaide, Re, Robe; P, Portland; M, Melbourne, W P, Wilson's Promontory, Go, Gabo; E, Eden, Ma, Moruya; C G Jervis Bay, Wg, Wollongong, S, Sydney, N, Newcastle, P M Port Macquarie; C, Clarence River, B, Brisbane; R, Rockhampton; C: Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally hot with scattered clouds in places, and fresh N.E. to N. winds, moderate and smooth sea, falling barometers, and light N.N.E. winds on coast; thunderstorm in night from N. at Eucla; rain 0.33.

Victoria.—Generally cloudy on coast, with light E. winds, falling barometers, and moderate sea; fine inland; no rain.

Tasmania.—Dull on N. coast, with light E. wind and falling barometers.

New Zealand.—Russell, bar. 30·00, wind S.W., 28. dull and squally; Wellington, bar. 29·90, wind S.W., squally, rain; Bluff, bar. 30·00. wind W., light and fine, 0·67.

New South Wales.—Generally fine and clear; winds light and from N.E. to S.E. and calm; smooth sea, rising barometers, light easterly winds (freshening), and scattered clouds in places on coast. Temora reports thunderstorm, rain 0.42; full details in map above.

Queensland.—Scattered clouds on coast, dull in places; sea moderate; wind, S.E. Rainfall: Cooktown, 0.06.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S., very hot, like storm, temperature 88°; Cape St. George, N., 56, fine, smooth sea, temperature 73; Clarence River, E., 8, fine, smooth sea, temperature 79; Deniliquin, calm, very hot, temperature 97°; Dubbo, N.W., 14, fine, temperature 89°; Eden, E.N.E., 28, fine, slight sea, temperature 69°; Goulburn, N.W., fine, temperature 75°; Menindie, N.W., hot, temperature 90°; Moruya, N.E., 42, cloudy, moderate sea temperature 72°; Newcastle, N.E., fine, smooth sea, temperature 75°; Port Macquarie, N.E., 28, fine, smooth sea, temperature 79°; Sydney, E., 13, fine, smooth sea, temperature 76°; Wentworth, N., fine, temperature 98°; Walgett, calm, hot, temperature 91°.

Victoria.—Melbourne, S., 8, cloudy, temperature 89°; Cape Otway, E., 8, foggy, slight sea, temperature 71°; Portland, E., 8, sultry, smooth sea, temperature 73°; Wilson's Promontory, N.E., 23, squally, rather rough sea, temperature 75°; Lake Entrance, E., 8, sultry, smooth sea; temperature 76°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 9 inches above summer level; at Hay, summer level; at Balranald, 3 inches above summer level; Murray: At Albury, 1 foot 1 inch above summer level; at Euston, 7 feet above summer level. Darling: At Wentworth, 6 feet 8 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 8.

Sun rises at 4.44, sets at 7.1; Moon, 6.17 a.m., 7.59 p.m.; Mercury, 6.1 a.m., 8.29 p.m.; Venus, 8.12 a.m., 10.22 p.m.; Mars, 12.16 a.m., 11.33 a.m.; Jupiter, 1.1 a.m., 1.6 p.m.; Saturn, 8.23 p.m., 6.19 a.m. New moon, 6th; full moon, 22nd.

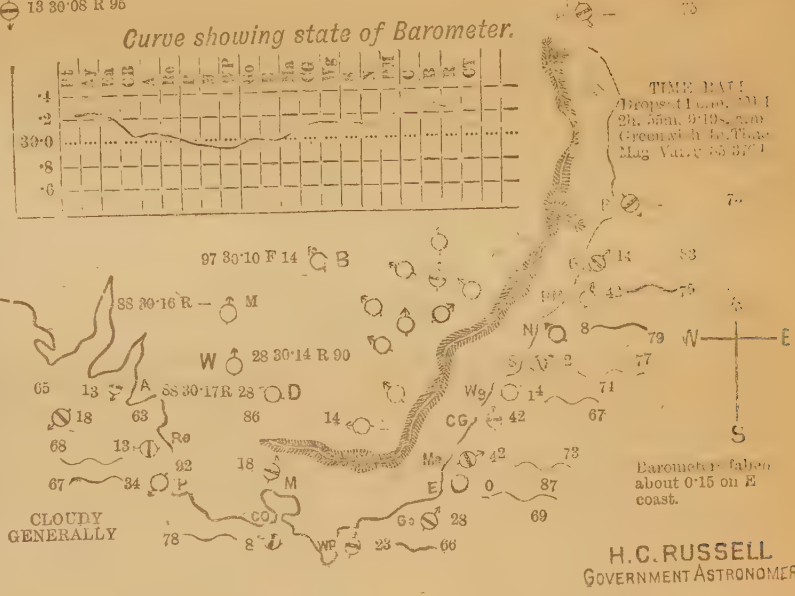
High water at Fort Denison, December 8: 9.13 a.m., 9.31 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 8, 1883.

Stations	W.T.	Mx	Mn	Rn
Albury	b	103	71	0
Armidale	b	86	60	0
Balranald	b	114	68	0
Bathurst	b	95	62	0·10
Bend'm'r	b	90	58	0·10
Bodalla ..	b	83	59	0
Bourke ..	b	110	75	0
C'md'n H.	b	81	67	0
C. St. Geo.	c	74	70	0
Carcoar ..	b	86	68	0·15
Casino ..	b	85	60	0
Cassilis ..	b	—	69	0
Clarence	b	90	65	0
C'nd'b'lin	b	87	60	0
Cooma ..	c	94	61	0
Coonab'n	b	98	62	0·02
C'nam'ble	c	--	--	0
Cowra ..	b	90	--	0
Deniliq'n	b	109	72	0
Dubbo ..	b	101	68	0·38
Eden	b	78	65	0
Euston ..	b	112	71	0
Forbes ..	b	103	73	0
Gl'n Inn's	—	--	--	—
Goulburn	c	96	61	0·34
Grafton ..	b	91	62	0
Gulgong	b	86	76	0·25
Gunned'h	b	106	74	0
Hay	b	107	78	0
Hill End	b	—	—	0·31
Inverell ..	b	88	63	0
Kiandra	b	83	51	0
Lismore	c	85	66	0
Maitland	b	96	65	0
Marsdens	b	100	77	0
Menindie	b	104	82	0
Molong ..	b	95	66	0
Moree ..	b	95	70	0
Moruya ..	c	77	64	0·01
Moss Vale	u	88	63	0·40
Mt. Hope	b	99	67	0
M. Vict'ria	c	88	58	0·22
Mudgee ..	b	98	61	0·53
M'rr'mb'h	b	98	71	0
M'rr'r'ndi	b	88	71	0
Mus'lb'r'k	b	107	68	0
Narrabri	b	109	71	0
Newcastle	c	80	66	0
Nowra ..	u	83	63	0
Orange ..	b	90	57	0
Picton ..	b	93	63	0·12
P. M'q'rie	b	85	64	0
P.St'ph'ns	b	86	66	0
Q'nbeyan	b	90	67	0
Quirindi	b	94	66	0
Singleton	b	95	71	0
SYDNEY ..	g	81	67	0
Tamw'rth	—	—	—	—
Taralga ..	b	95	60	0
Taree	b	91	65	0
T'nt'rfield	b	84	50	0
Wagga ..	b	87	73	0
Walcha ..	b	84	45	0
Walgett..	b	102	74	0
W'ntw'rth	b	99	60	0
Wilcannia	b	--	--	0
W'll'ng'ng	b	80	64	0·01
Young ..	b	100	65	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 8 38·713
Barometers corrected to 32° Fah. and Mean Sea Level.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx, gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; rn, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sky, and, lastly, figures denoting the temperature of the air. The barometer curve shows the state of barometer [illegible] Perth, Adelaide, Eucla, Cape Borda, Alice Springs, Port Darwin, Cooktown, Port Robe, Portland, Melbourne, W.P. Wilson's Promontory, Cape Otway, E. Gippsland, Mt. Moruya, C. Gidervis Bay, Wagga Wagga, Sydney, Newcastle, Port Macquarie, C. Clarence River, Brisbane, Rockhampton, Cooktown. In [illegible] the state of barometer is given at places at Albury, Bathurst, Wentworth, Menindie, Bourke and Alice Springs. The barometer curve [illegible] at a glance to trace the [illegible], beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light S.E. and variable winds and smooth sea; showery at Albany. Rainfall, 003. Heavy rains and thunderstorms on 6th and 7th.

South Australia reports weather generally dull and sultry; but cooler inland to Hawker, scattered clouds to Port Darwin, and W. of Cape Borda; prevailing winds S.W. to S. and moderate; smooth sea, S.W. winds, and rising barometers on coast. No rain.

Victoria.—Cloudy on coast, with light variable winds, falling barometer, and smooth sea; fine and clear inland with light N. winds. No rain. Dense fog at Wilson's Promontory till 4 a.m.

New Zealand.—Russell, bar. 30·20, wind S.W., dull; Wellington, bar. 29·90, wind N.E., fine; Bluff, bar. 29·90, wind S.W., fine, but cloudy.

New South Wales.—Generally fine, clear, and hot, with light to fresh N.E. to N.W. winds and calms; smooth sea, falling barometers, light N.N.E. winds, and scattered clouds in places on coast. Northerly winds and calms, with rising barometers, and very hot weather, inland.

Queensland.—Cloudy generally, with S.E. winds and moderate sea. Rainfall: Townsville, 0·46.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, N.E., very hot, temperature 92°; Cape St. George, W.N.W., 42, fine, temperature 83°; Clarence River, N.E., 28, fine, smooth sea, temperature 78°; Dubbo, calm, fine, temperature 88°; Eden, N.E., 14, fine, slight sea, temperature 77°; Goulburn, W., fine, hot, temperature 81°; Moruya, S.S.E., 28, fine, moderate sea, temperature 75°; Newcastle, N.E., 8, fine, smooth sea, temperature 79°; Port Macquarie, N.N.E., 42, fine, smooth sea, temperature 77°; Sydney, E.N.E., 8, fine, hot, smooth sea, temperature 89°; Wentworth, N.W., fine, temperature 90°; Walgett, calm, fine and hot, temperature 99°. A terrific thunderstorm came on at Rylstone, near Mudgee, this afternoon (Tuesday), and in 45 minutes (that is, between 2.40 p.m. and 3.25 p.m.) 2.24 inches of rain fell.

Victoria.—Melbourne, S., dull, thunderstorm, temperature 69°; Cape Otway, W., 13, dull, rough sea, temperature 72°; Portland, W.S.W., 28, fine, but cloudy, smooth sea, temperature 72°; Wilson's Promontory, W., 23, dull, moderate sea, temperature 72°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 9 inches above summer level; at Hay, summer level. Murray: At Albury, 1 foot 1 inch above summer level; at Euston, 6 feet above summer level. Darling: At Wentworth, 6 feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, summer level.

ASTRONOMICAL MEMORANDA FOR DECEMBER 9.

Sun rises at 4.44, sets at 7.2; Moon, 7.7 a.m., 8.45 p.m.; Mercury, 5.58 a.m., 8.24 p.m.; Venus, 8.13 a.m., 10.21 p.m.; Mars, 12.13 a.m., 11.31 a.m.; Jupiter, 12.57 a.m., 1.2 p.m.; Saturn, 8.18 p.m., 6.14 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 9: 9.49 a.m., 10.7 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 9,

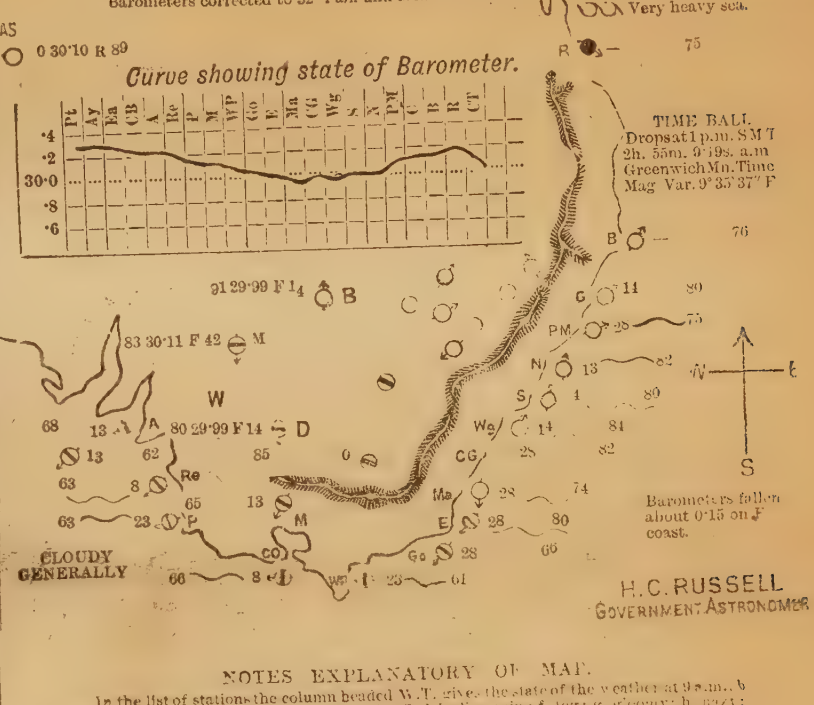
Stations	wt	Mx	Mn	R'in
Albury	c	108	72	0
Armidale	b	89	62	0
Balranald	c	116	61	0
Bathurst	b	94	64	0·14
Bend'ni'r	b	89	56	0
Bodalla ..	b	107	64	0
Bourke ..	b	112	77	0
C'md'n H.	b	80	68	0
C. St. Geo.	b	88	63	0
Carcoar ..	g	88	69	0·07
Casino ..	b	94	59	0
Cassilis ..	b	—	74	0
Clarence	b	86	65	0
C'nd'b'lin	c	88	-	0
Cooma ..	g	99	57	0
Coonab'n	b	103	63	0·01
C'nam ble	b	—	—	0
Cowra ..	g	91	85	0·06
Deniliq'n	c	109	68	0
Dubbo ..	b	105	69	0·08
Eden	c	80	68	0
Euston ..	g	112	65	0
Forbes ..	b	107	69	0
Gl'n Inn's	b	93	53	0
Goulburn	b	98	64	0·02
Grafton ..	c	94	63	0
Gulgong	b	89	69	0
Gunned'h	b	107	71	0·05
Hay	c	112	75	0
Hill End	b	—	—	0·08
Inverell ..	b	89	65	0·19
Kiandra	c	87	52	0
Lismore	b	90	64	0
Maitland	b	102	70	0
Marsdens	b	101	81	0
Menindie	g	103	78	0
Molong ..	b	104	63	0·73
Moree ..	b	98	68	0·14
Moruya ..	c	84	69	0
Moss Vale	c	92	67	0·01
Mt. Hope	–	—	—	—
M.Vict'ria	b	84	59	0·27
Mudgee ..	c	97	60	0·05
M'rr'mb'h	c	101	77	0
M'rr'r'ndi	c	91	70	0·30
Mus'lb'r'k	b	109	70	0
Narrabri	b	110	71	0
Newcastle	b	92	71	0
Nowra ..	c	101	71	0·08
Orange ..	c	92	61	0·13
Picton ..	b	96	71	0·05
P. M'q'rie	b	80	62	0
P.St'ph'ns	–	..	—	
Q'nbeyan	b	96	69	0
Quirindi	b	94	61	0
Singleton	b	101	71	0
SYDNEY ..	b	94	72	0
Tamw'rth	b	98	63	0
Taralga ..	b	101	65	0
Taree	b	97	70	0
T'nt'rfield	b	88	55	0
Wagga ..	–	—	—	—
Walcha ..	b	88	54	0
Walgett ..	b	107	72	0
W'ntw'rth	–	—	—	—
Wilcannia	b	—	—	0
W'll'ng'ng	b	95	71	0
Young ..	u	101	81	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years .....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 9.. 36 724
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours. Mn the corresponding minimum temperature; Rin, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with bar. cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown.—Pt. Perth Ay. Albany, Ea. Eucla, CB Cape Borda, A Adelaide, Re. Robe, P. Portland; M, Melbourne, WP. Wilson's Promontory, Co. Gabo, E. Eden, Ma. Moruya; CG Jervis Bay, We. Wollongong, S. Sydney, N. Newcastle, PM Port Macquarie; C. Clarence River, B. Brisbane; R. Rockhampton; Ct. Cooktown. Inland the state of barometer is given in figures at Albury Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally fine and clear, with light S.E. and S.W. winds and smooth sea.

South Australia reports weather generally fine but cloudy, and cool; prevailing winds, S.W. to S. and fresh, smooth sea, rising barometers, and S.W. winds on coast. Rainfall: Peake, 0·36, and falling still at 9 a.m.

Victoria.—Generally cloudy, smooth and moderate sea; rising barometer, and fresh S.W. winds on coast; foggy at Cape Otway; fresh W. wind and cloudy inland at Echuca. Rainfall: Melbourne, 0·04; Cape Otway, 0·01; and Lake Entrance, 0·10.

Tasmania.—Fine on N. coast, with fresh W.N.W. wind. No rain.

New Zealand.—Russell, bar. 30·20, wind S.W., dull; Wellington, bar. 29·90, wind N.E., fine; Bluff, bar. 29·90, wind W., fine, but cloudy.

New South Wales.—Generally fine, and clear, scattered clouds in places—mostly in southern parts; smooth sea, falling barometers, and light northerly winds on coast, and variable winds and calms inland. The temperature reports from the country stations (vide map above) show Tuesday, 8th, to have been exceptionally hot both inland and on coast. At many of the stations east of the Mountains the temperature in the shade exceeded 100°; at Bodalla a hot wind was blowing, temperature 107°. Inland, as might have been expected, the temperature was much higher. Out of 31 stations west of the Mountains, 19 registered over 100°, the highest being 116°, at Balranald. Rylstone reports a total rain for 24 hours, to 9 a.m. 9th instant, of 2.38 inches.

Queensland.—Generally fine and clear, with light S.E. trades and moderate sea. Showery at Rockhampton. No rain recorded.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S., like storm, temperature 87°; Cape St. George, S., 28, fine, temperature 72°; Deniliquin, S.W., cloudy, temperature 76°; Dubbo, showery, temperature 88°; Goulburn, W., fine, hot, temperature 81°; Menindie, S.W., 12, fine, temperature 88°; Newcastle, N.E., fine, smooth sea, temperature 79°; Port Macquarie, N.N.E., 42, fine, hazy, smooth sea, temperature 77°; Sydney, S.W., 12, dull and cloudy, smooth sea, temperature 78°; Wentworth, S., 28, dull, temperature 72.

Victoria.—Melbourne, S., 13 fine, temperature 68°; Cape Otway, W., 13, dull, foggy, rough sea, temperature 70°; Portland, W.S.W., 28, fine, smooth sea, temperature 67°; Wilson's Promontory, W., 23, dull, squally, moderate sea, temperature 67°; Lake Entrance, S.E., 8, hazy, slight sea, temperature 69°.

STATE OF RIVERS.

Murrumbidgee: At Balranald, summer level. Murray: At Albury, 1 foot above summer level; at Euston, 6 feet above summer level. Darling: At Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 10.

Sun rises at 4.4, sets at 7.2; Moon, 7.58 a.m., 9.23 p.m.; Mercury, 5.55 a.m., 8.19 p.m.; Venus, 8.14 a.m., 10.20 p.m.; Mars, 12.10 a.m., 11.28 a.m.; Jupiter, 12.54 a.m., 12.59 p.m.; Saturn, 8.14 p.m., 6.9 a.m. Newmoon, 6th; full moon, 22nd.

High water at Fort Denison, December 10: 10.25 a.m., 10.43 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 11.

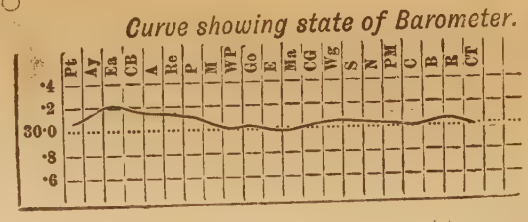
Stations	wt	Mx	Mn	R'in
Albury	b	98	67	0
Armidale	b	92	67	0·07
Balranald		95	56	0
Bathurst	b	92	62	0
Bend'm'r	l	92	64	0·50
Bodalla ..		—	—	—
Bourke ..		114	82	0
C'md'n H.		82	70	0
C. St. Geo.	u	84	59	0·15
Carcoar ..	b	85	74	0·11
Casino ..	b	100	65	0
Cassilis .	c	—	73	0·11
Clarence	b	84	63	0
C'nd'b'lin	b	88	61	0
Cooma ..	g	96	58	0
Coonab'n	g	99	63	0·15
C'nam ble	u	—	—	0
Cowra ..	g	90	76	0·16
Deniliq'n	g	89	59	0
Dubbo ..	c	103	69	0·19
Eden	g	82	64	0
Euston ..	u	95	55	0·16
Forbes ..	b	101	67	0
Gl'n Inn's	b	83	58	0·60
Goulburn	b	97	56	0·42
Grafton ..	b	98	67	0
Gulgong	b	89	69	0
Gunned'h	c	106	76	0
Hay	g	91	81	0
Hill End	b	—	—	0·07
Inverell ..	b	89	66	0
Kiandra	c	85	55	0
Lismore	b	93	66	0
Maitland	b	105	69	0·13
Marsdens	b	100	75	0·10
Menindie	u	82	75	0
Molong ..	b	98	66	0·08
Moree ..	c	98	78	0
Moruya ..	—	—	—	—
Moss Vale	u	91	58	0·61
Mt. Hope	b	99	70	0
M. Vict'ria	g	85	56	1·02
Mudgee ..	c	99	62	0·03
M'rr'mb'h	b	97	67	0·07
M'rr'r'ndi	c	92	70	0·08
Mus'lb'r'k	b	115	64	0·09
Narrabri	o	110	73	0
Newcastle	b	83	65	0·01
Nowra ..	u	96	60	0·53
Orange ..	c	89	61	0
Picton ..	u	101	64	0·69
P. M'q'rie	c	84	65	0
P.St'ph'ns	b	84	63	0
Q'nbeyan	b	93	65	0·03
Quirindi	—	..	—	—
Singleton	b	105	72	0·13
SYDNEY ..	g	91	62	0·24
Tamw'rth	—	--	-	—
Taralga ..	b	98	57	0·32
Taree	b	98	70	0
T'nt'rfield	b	91	59	0·04
Wagga ..	b	107	67	0
Walcha ..	c	91	62	0·01
Walgett ..	g	107	77	0
W'ntw'rth	—	—	—	—
Wilcannia	c	--	--	0
W'll'ng'ng	u	88	63	0·02
Young ..	o	99	62	0·35

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·573
Total Rainfall from January 1st to December 10.. 36·965
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Cloudy, wind E
T. storm — Rain, wind S. — wind S
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



TIME BALL
Dropsat 1 p.m. S.M.T.
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E.

Barometers risen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth, Ay. Albany, Ea. Eucla, CB Cape Borda, A. Adelaide, Re. Robe, P. Portland; M. Melbourne, WP Wilson's Promontory, Go. Gabo; E. Eden, Ma. Moruya; C G Jervis Bay; Wg Wollongong, S. Sydney, N. Newcastle, P M Port Macquarie; C. Clarence River, B Brisbane R. Rockhampton; Ct. Cooktown. Inland the state of barometer is given in figures at Albury Deniliquin, Wentworth Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them and southerly following.

Western Australia.—Generally fine, with light variable southerly and easterly winds and smooth sea. No rain.

South Australia reports weather generally fine and cool, scattered clouds on and near coast and north of Farina; prevailing winds, S.W. to S.E. and light thunderstorms N. of Charlotte in night, with rain in places; smooth sea, rising barometers, and S. winds on coast. Rainfall: Port Darwin, 0·69; Daly Waters, 0·; Tennant's Creek, 0·06; Farina, 0·07; M'Donnell Bay, 0·01.

Victoria.—Generally cloudy, with light southerly winds and steady barometers, smooth and slight sea, and fresh S.W. winds on coast. Rainfall: Lake Entrance, 0·01.

Tasmania.—Fine but cloudy on N. coast, with light W.N.W. wind.

New Zealand.—Russell, bar. 30·10, wind S.W., dull; Wellington, bar. 29·60, wind N.E., cloudy; Bluff, bar. 29·50, wind S.W., dull, passing showers.

New South Wales.—Generally cloudy and unsettled, with light southerly winds and rising barometers; light rains recorded, heaviest 1·02, at Mount Victoria; smooth sea, light and southerly winds on coast. Rain: Temora, 0·18; Camden, 0·50; Pooncarie, 0·04. Full details in map above.

Queensland.—Generally fine and clear, light E. trades and moderate sea. Rainfall: Cooktown, 0·03; light rain falling at Townsville.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, S.W., cloudy, close, temperature 92°; Cape St. George, S.S.E., 14, cloudy, smooth sea, temperature 70°; Deniliquin, S., 14, dull, temperature 84°; Dubbo, S.W., 14, cloudy, thundery, temperature 87°; Eden, E., 14, cloudy, smooth sea, temperature 65°; Goulburn, E.N.E., fine, temperature 77°; Menindie, S.W., fine, hot, temperature 84°; Newcastle, S., 8, fine, smooth sea, temperature 72°; Port Macquarie, S.E., hazy, smooth sea, temperature 85°; Sydney, E.S.E., 8, cloudy, smooth sea, temperature 74°; Wentworth, N.E., 28, dull and sultry, temperature 70°.

Victoria.—Barometers steady. Melbourne, S., 12, cloudy, temperature 64°; Cape Otway, S.W., misty, smooth sea, temperature 74°; Portland, S., 30, cloudy, smooth sea, temperature 67°; Wilson's Promontory, W.N.W., 24, cloudy, smooth sea, temperature 65°; Lake Entrance, N.E., cloudy, smooth sea, temperature 66°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 6 inches above summer level; at Balranald, summer level. Murray: At Albury, 1 foot above summer level; at Euston, 5 feet 6 inches above summer level. Darling: At Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 11.

Sun rises at 4.44, sets at 7.3; Moon, 8.50 a.m., 10.8 p.m.; Mercury, 5.52 a.m., 8.14 p.m.; Venus, 8.15 a.m., 10.20 p.m.; Mars, 12.7 a.m., 11.26 a.m.; Jupiter, 12.50 a.m., 12.55 p.m.; Saturn, 8.9 p.m., 6.4 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 11: 11.1 a.m., 11.18 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 11, 1885

Stations	wt	Mx	Mn	R'in
Albury	b	90	58	0
Armidale	b	90	62	0·05
Balranald	b	89	48	0
Bathurst	b	90	58	0·88
Bend'm'r	b	88	62	0·06
Bodalla ..	-	--	--	—
Bourke ..	b	112	77	0
C'md'n H.	b	80	71	0
C. St. Geo.	-	—	—	—
Carcoar ..	b	85	71	0·13
Casino ..	b	101	66	0
Cassilis ..	g	—	63	0·35
Clarence	b	88	68	0
C'nd'b'lin	c	75	56	0·55
Cooma ..	r	90	53	0·68
Coonab'n	b	98	61	0·17
C'nam ble	u	--	--	0
Cowra ..	b	87	76	0·04
Deniliq'n	b	85	54	0
Dubbo ..	c	103	63	0·07
Eden	c	66	63	0
Euston ..	b	86	55	0·07
Forbes ..	b	98	62	0·57
Gl'n Inn's	b	84	59	0·72
Goulburn	c	84	59	0·26
Grafton ..	b	100	71	0·02
Gulgong	c	89	67	0·70
Gunned'h	b	106	72	0
Hay	b	86	71	0
Hill End	b	—	—	0
Inverell ..	b	80	67	0·74
Kiandra	c	75	51	0
Lismore	c	96	72	0
Maitland	u	88	69	1·45
Marsdens	b	93	71	0·01
Menindie	b	91	71	0
Molong ..	b	97	62	1·35
Moree ..	g	10[illegible]	72	0·03
Moruya ..	-	--	--	—
Moss Vale	u	78	60	0·69
Mt. Hope	g	92	75	0
M. Vict'ria	g	78	54	0·37
Mudgee ..	g	99	58	0·76
M'rr'mb'h	c	93	78	0
M'rr'r'ndi	c	88	68	0
Mus'lbr'k	g	101	65	0·52
Narrabri	c	103	71	0
Newcastle	g	81	67	1·58
Nowra ..	u	70	63	0·93
Orange ..	c	90	58	0·77
Picton ..	u	77	64	0·41
P. M'q'rie	-	—	—	--
P.St'ph'ns	c	84	64	2·67
Q'nbeyan	g	90	65	0
Quirindi	b	94	65	0·10
Singleton	u	90	71	0·70
SYDNEY ..	g	77	67	0·24
Tamw'rth	c	99	62	0·03
Taralga ..	g	80	40	0·19
Taree	c	92	73	0
T'nt'rfield	c	95	61	0·37
Wagga ..	b	95	62	0
Walcha ..	b	88	58	0·07
Walgett ..	c	108	74	0
W'ntw'rth	b	86	59	0
Wilcannia	b	--	--	0
W'll'ng'ng	f	76	65	1·18
Young ..	c	96	62	0·01

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 11.. 37·209
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N; Clo wind E; T. storm, wind S.; Rain, wind W. If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.

13 30·06 S 89

Curve showing state of Barometer.

TIME BALL
Dropsat 1 p.m. SMT
2h. 55m 0·9s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E

Barometers risen about 0·10 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m. b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay, Albany; Ea, Eucla, CB Cape Borda, A. Adelaide, Re. Robe, P. Portland; M, Melbourne, WP, Wilson's Promontory, Go, Gabo, E. Eden, Ma. Moruya; CG Jervis Bay, Wg. Wollongong, S. Sydney, N. Newcastle, PM Port Macquarie; C, Clarence River B. Brisbane; R. Rockhampton; Ct. Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with S.E. and E. light winds, and smooth sea. No rain.

South Australia reports weather generally fine and clear, with light S.E. to E. winds; scattered clouds on coast and north of Tennant's Creek. Sea smooth, barometers steady. Thunderstorms during night to north of Peake. No rain.

Victoria.—Generally cloudy. Smooth sea, rising barometers, and light S. and S. E. winds on coast; misty in places; fine inland at Echuca, with fresh S.W. wind. Dull, with light N. wind at Omeo. No rain.

New Zealand.—Russell, barometer 30·, S.W., fine but cloudy; Wellington, barometer 30·, S.W., fine but cloudy; Bluff, barometer 30·, W., fine but cloudy.

New South Wales.—Weather generally cloudy in eastern parts and on mountains; prevailing winds, light from S.E.; barometers rising; fine inland, with S.E. winds and calms; smooth sea, cloudy weather, and light E.S.E. winds on coast. Camden reports weather dull, rain 0·60; Walgett reports the River Barwon 2 feet 6 inches above summer level and rising, and the Namoi still low.

Queensland.—Brisbane, N., fine, barometer 30·07, thermometer 79·; Townsville, S.E., threatening rain, smooth sea, barometer 29·92, temperature 73·.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.W., 18, cloudy, temperature 64· Cape Otway, E.S.E., dull, smooth sea, temperature 64·; Wilson's Promontory, N.E., 13, dull, slight sea, temperature 70. Lake Entrance, N.E., 8, dull, smooth sea, temperature 67·.

New South Wales.—Albury, W., fine, warm, temperature 84·; Cape St. George, S.E., 14, fine, rain 0·50, smooth sea; Clarence River, N.E., fine, smooth sea, temperature 78·; Deniliquin, S., fine, hot, temperature 84·; Dubbo, calm, fine, temperature 84·; Eden, E.S.E., 14, fine, slight sea, temperature 66·; Goulburn, E., dull, temperature 72·; Moruya, S.E., 28, dull, smooth sea, temperature 63·; Newcastle, S.E., 8, fine, smooth sea, temperature 74·; Port Macquarie, S.S.E., 28, hazy, smooth sea, temperature 86·; Sydney, S.E., 8, dull, smooth sea, temperature 71·; Wentworth, E., fine, temperature 79·.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 6 inches above summer level. Murray: At Albury, 1 foot 2 inches above summer level; at Euston, 5 feet 2 inches above summer level. Darling: At Wentworth, 5 feet 8 inches above summer level; at Pooncarie and Menindie, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 12.

Sun rises at 4.44, sets at 7.4; Moon, 9.43 a.m., 10.45 p.m.; Mercury, 5.49 a.m., 8.9 p.m.; Venus, 8.16 a.m., 10.19 p.m.; Mars, 12.4 a.m., 11.24 a.m.; Jupiter, 12.46 a.m., 12.52 p.m.; Saturn, 8.4 p.m., 5.59 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 12: 11.37 a.m., 11.55 p.m.

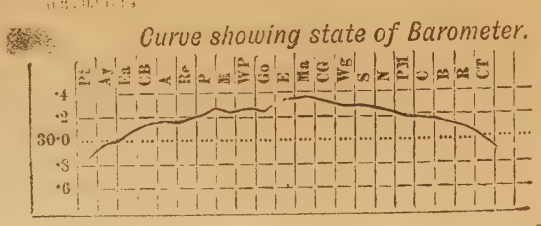
METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 12, 1885

Stations	wt	Mx	Mn	r'in
Albury	c	96	66	0
Armidale	—	—	—	-
Balranald	b	101	51	0
Bathurst	g	86	63	0·01
Bend'm'r	u	87	60	0·47
Dodalla ..	--	--	--	—
Bourke ..	b	107	74	0
C'nd'n H.	c	81	71	0
C. St. Geo.	c	65	59	0
Carcoar ..	b	81	63	0·07
Casino ..	b	99	65	2·37
Cassilis .	c	—	69	0
Clarence	c	87	67	0
C'nd'b'lin	g	78	62	0
Cooma ..	c	77	55	0·50
Coonab'n	c	96	57	0·36
C'namble	b	--	--	0
Cowra ..	b	91	73	0
Deniliq'n	b	96	55	0
Dubbo ..	c	93	65	0·79
Eden	u	67	61	0·25
Euston ..	b	95	64	0
Forbes ..	b	95	66	0
Gl'n Inn's	c	84	57	0·77
Goulburn	g	71	56	0·93
Grafton ..	g	97	69	0·30
Gulgong	u	82	63	0·10
Gunned'h	b	97	67	0·30
Hay	b	93	81	0
Hill End	b	—	—	0·17
Inverell ..	o	88	66	0·83
Kiandra	c	75	5	0·50
Lismore	g	94	72	0·05
Maitland	u	88	71	0·02
Marsdens	b	95	75	0
Menindie	b	94	70	0
Molong ..	b	94	64	0
Moree ..	b	96	65	0·51
Moruya ..	—	—	—	—
Moss Vale	u	66	54	0·08
Mt. Hope	b	102	75	0
M. Vict'ria	g	75	55	0·88
Mudgee ..	u	91	60	0·34
M'rr'mb'h	b	91	64	0·04
M'rr'r'ndi	u	85	68	0·13
Mus'lbr'kk	g	190	65	0·06
Narrabri	b	194	66	0·10
Newcastle	c	76	69	0
Nowra ..	—	—	—	—
Orange ..	g	86	60	0
Picton ..	r	73	65	0·65
P. M'q'rie	c	82	76	0·01
P.St'ph'ns	g	82	62	0·10
Q'nbeyan	c	76	63	0·13
Quirindi	b	91	62	0·07
Singleton	r	89	70	0·06
SYDNEY ..	g	77	68	0·04
Tamw'rth	b	90	63	0·58
Taralga ..	d	73	46	0·12
Taree	p	89	70	0·45
T'nt'rfield	c	89	59	1·52
Wagga ..	b	00	64	0
Walcha ..	g	88	51	0·51
Walgett ..	b	102	69	0·03
W'ntw'rth	b	92	64	0
Wilcannia	b	--	-	0
W'll'ng'ng	g	66	64	3·07
Young ..	b	96	60	0

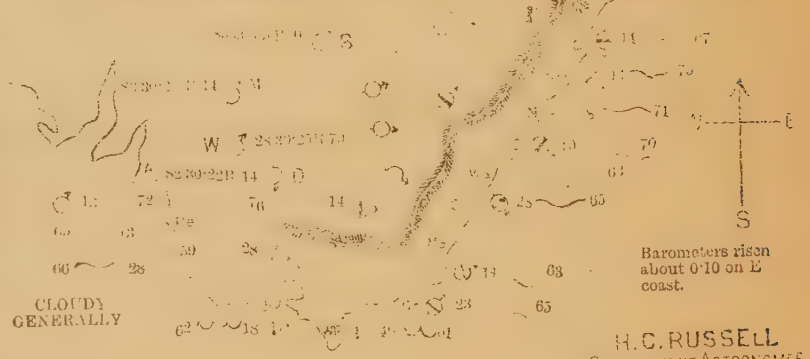
SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·[illegible]
Average for 27 years from Jan. 1st to November 30 47·5[illegible]
Total Rainfall from January 1st to December 12 37·39
Barometers corrected to 32° Fah. and M[illegible]

Fine, wind S. — Cloudy, wind E. — T. storm, wind S. — Rain, wind [illegible]
If it is calm, the symbol is used without the arrow.
Smooth sea — Heavy sea. — Very heavy sea.



TIME BALL
[illegible] 2h. 7m. [illegible] Greenwich Mn. Time
Mar. [illegible]



H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the Bston [illegible] the state of the weather at 9 a.m.: b [illegible] sky; c. Cirrocumulus; d. drizzling rain; f. fog; g. gloomy; h. hazy; m. misty; r. rosty; o. overcast; p. passing showers; r. rain; s. snow; t. thunder; u. [illegible] threatening. The next column [illegible] maximum temperature for previous 24 hours. [illegible] the corresponding minimum temperature; r'n. the rain for the previous 24 hours. [illegible] used in the map are explained on the margin. At each coast station [illegible] the wind [illegible] with bar. cloudy [illegible] the wind [illegible] per hour, next, a symbol showing the state [illegible] the shade temperature at 9 a.m. The barometer [illegible] the coast from Perth to Cooktown.—Pt. [illegible] Cape Borda; A. Adelaide; Re. Robe; P. Portland; [illegible] N. Newcastle; P.M. Port Macquarie; C. Clarence [illegible] Cooktown. [illegible] the state of barometer [illegible] Wentworth, Menindie, Bourke, and Alice Springs. [illegible] curve enables [illegible] at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Fine on south coast with light E. wind. Fine but cloudy and calm on west coast. No rain reported. Sea moderate.

South Australia reports weather generally fine and warm, scattered clouds north of Barrow Creek. Thunderstorms north of Tennant's Creek during night; smooth sea and steady barometers on coast; prevailing winds S.E. to N.E. and light. Rainfall: Port Darwin, 0·19; Tennant's Creek, 0·09.

Victoria.—Cloudy on coast, with strong E. wind, moderate sea, and steady barometers, fine and clear inland, with lighter easterly winds and calms, and slowly rising barometers; misty with rough sea at Cape Otway. No rain.

Tasmania.—Cloudy on N. coast with fresh N.E. wind.

New Zealand.—Russell, barometer 30·20, wind S.W., dull; Wellington, barometer 30·10, wind N.E., fine; Bluff, barometer 30·20, wind, S.W., fine but cloudy.

New South Wales.—Generally cloudy on coast and mountains. Fine and clear inland. Glen Innes, Lismore, and Walgett report thunderstorms, with rain, yesterday p.m., and a scattered, and in places very heavy but partial, rainfall has visited the coast districts, Wollongong recording as much as 3·07, and Casino 2·37, while intermediate and by no means distant stations, to wit, Clarence Heads, Newcastle, and Cape St. George, were entirely without rain. Little or no rain has fallen west of the mountains. Full details will be found in map above. Camden reports light showers falling at 9 a.m.—rainfall 0·27.

Queensland.—Generally cloudy in Northern parts; prevailing wind S.E. in north and N.E. south of Cape Moreton. Rainfall—Rockhampton, 0·08; Townsville, 0·35

3 P.M. OBSERVATIONS.

Victoria.—Cape Otway, E., 18, misty, high sea, temperature 64°; Portland, E.S.E., 36, fine, smooth sea, temperature 69°; Wilson's Promontory, E., 42, squally, rough sea, temperature 65°.

New South Wales.—Albury, E., fine, temperature 84°; Cape St. George, S.E., 28, smooth, temperature 69°; Clarence River, S.E., 10, cloudy, smooth sea, temperature 76°; Deniliquin, S., fine, hot, temperature 88°; Goulburn, E., 10, cloudy, temperature 69°; Menindie, N.E., fine, hot, temperature 88°; Moruya, E., 28, cloudy, smooth sea, temperature 67°; Newcastle, S.E., 20, fine, smooth sea, temperature 72°; Port Macquarie, S.E., 20, thick, raining, smooth sea, temperature 75°; Sydney, S.E., 15, cloudy, cool, temperature 71°; Wentworth, W., 20, fine, temperature 85°; Walgett, calm, fine, temperature 94°.

Sunday, 9 p.m.—Rain fallen since 4 p.m. to-day 0·54; light easterly wind and thick weather.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 3 inches above summer level; at Hay, below summer level; at Balranald, above summer level. Murray: At Albury, 1 foot 1 inch above summer level; at Euston, 4 feet 10 inches above summer level. Darling: At Wentworth, 5 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 14.

Sun rises at 4.45, sets at 7.5; Moon, 11.30 a.m., 11.52 p.m. Mercury, 5.42 a.m., 8 p.m.; Venus, 8.18 a.m., 10.18 p.m.; Mars, 11.59 a.m., 11.19 a.m.; Jupiter, 12.89 a.m., 12.45 p.m.; Saturn, 7.55 p.m., 5.49 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 14: 12.32 a.m. and 12.53 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 15, 1

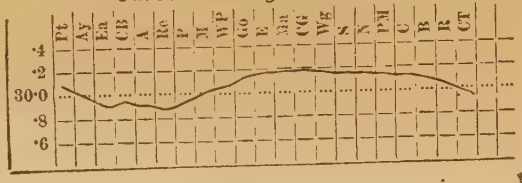
Stations	wt	Mx	m	r'in
Albury	b	97	64	0·75
Armidale	u	76	50	0·01
Balranald	b	107	61	0
Bathurst	r	80	50	0·04
Bend'm'r	u	85	54	0
Bodalla ..	c	78	42	0·45
Bourke ..	b	109	67	0
C'md'n H.	r	80	66	2·50
C. St. Geo.	c	73	61	0·53
Carcoar ..	g	78	5	0·12
Casino ..	c	87	65	0
Cassilis .	u	—	65	0·08
Clarence	c	86	65	0
C'nd'b'lin	b	74	53	0·12
Cooma ..	b	77	56	0
Coonab'n	c	90	56	0
C'namble	c	--		0
Cowra ..	b	85	75	0
Deniliq'n	a	104	66	0
Dubbo .	c	93	62	0
Eden	u	67	63	0·42
Euston ..	b	110	66	0
Forbes ..	c	93	62	0·09
Gl'n Inn's	u	77	58	0·44
Goulburn	g	69	55	0·07
Grafton ..	u	81	63	0·11
Gulgong	u	80	60	0
Gunned'h	c	89	67	0
Hay	c	101	61	0
Hill End	r	--	--	0·20
Inverell ..	u	83	65	0·05
Kiandra	c	74	45	0·77
Lismore	c	85	70	0
Maitland	u	89	64	0·09
Marsdens	b	87	68	0·19
Menindie	b	100	66	0
Molong ..	c	89	62	0
Moree ..	c	92	68	0·03
Moruya ..	c	75	61	0·80
Moss Vale	u	66	56	0·16
Mt. Hope	b	101	72	0
M. Vict'ria	r	66	50	0·54
Mudgee ..	r	84	57	0·30
M'rr'mb'h	c	84	64	0·44
M'rr'r'ndi	r	79	63	0
Mus'lbr'k	g	85	62	0·35
Narrabri	g	96	67	0·16
Newcastle	g	75	65	0·53
Nowra ..	c	80	61	0·33
Orange ..	r	76	55	1·22
Picton ..	r	7..	60	2·57
P. M'q'rie	p	75	65	6·69
P.St'ph'ns	p	81	63	0
Q'beyan	c	74	53	0
Quirindi	u	87	62	0
Singleton	u	80	71	0·93
Sydney ..	g	76	63	0
Tamw'rth	c	83	62	0
Tarralga ..	d	--	63	0·67
Taree	g	80	66	0·64
Tent'rfield	u	83	57	0
Wagga ..	b	96	62	0
Walcha ..	u	69	56	0
Walgett ..	b	104	45	0
W'nt'w'rth	c	105	75	0
Wilcannia	b	--	--	0
W'll'ngong	p	76	62	0·50
Young ..	g	91	58	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.: LONGITUDE 16h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years ..... 50·242
Average for 27 years from Jan. 1st to November 30 4[illegible] 58·3
Total Rainfall from January 1st to [illegible] 38·178
Barometers corrected to 32 Fah. and Mean Sea Level

L [illegible] wind S. C'a wind E. T. storm wind S. R'ain wind W. If it is CALM, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.

Curve showing state of Barometer.



TIME BALL. Dropped 1 p.m. S.M.T. (2h. 4m. 9·19s. a.m. Greenwich Mean Time). Mag. Var. 9° 3·37' E.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, Mx gives the maximum temperature for previous 24 hours, Mn the corresponding minimum temperature; r'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla, CB Cape Borda, A, Adelaide; Re, Robe; P, Portland; M, Melbourne, WP Wilson's Promontory, Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong S, Sydney, N, Newcastle, P M, Port Macquarie; C, Clarence River B Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light east winds and calms and smooth sea. Rainfall: Perth, 0·06; Esperance Bay, 0·01.

South Australia.—Generally hot and sultry, with scattered clouds and light variable winds and calms; smooth sea, rising barometers, and light N. winds on coast. Rainfall: Peake, 0·02.

Victoria.—Generally cloudy on coast, with light N.E. winds, falling barometers, and smooth seas; fine and clear inland, with light N.E. and N. winds; foggy at Cape Otway; no rain.

Tasmania.—Dull on north coast, with fresh N.E. wind and falling barometer.

New Zealand.—Fair generally. Russell, barometer 30·10, wind S.W.; Wellington; barometer 30·00, wind N.E.; Bluff, barometer 30·10, wind W.

New South Wales.—Generally fine and clear, with light N.E. winds and calms inland. Dull on coast and mountains, with light rain falling in places. (See map.) Smooth sea, falling barometers, and light S.E. to S.W. winds on coast. Port Macquarie reports a very heavy fall for Saturday and Sunday, amounting to 6·69 inches. Camden reports 1·15 and weather dull. Thunderstorms reported in many places since Saturday; at 9 a.m. it was raining on the mountains from Goulburn to Mudgee, and thence eastward.

Queensland.—Fine in S. to the sea, cloudy in northern parts, winds S.E., sea slight. Rainfall—Cooktown 1·10 and showery, and Brisbane 0·17.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.E., 13, fine, temperature 92°; Cape Otway, E., 8, fine, slight sea, temperature 74°; Wilson's Promontory, N.E., 23, squally, moderate sea, temperature 76°.

New South Wales.—Albury, W., fine, temperature 80°; Cape St. George, E.N.E., 14, fine, smooth sea, temperature 72°; Clarence River, S., 14, cloudy, smooth sea, temperature 73°; Deniliquin, N., fine, temperature 91°; Eden, N.E., 28, fine, moderate sea, temperature 71°; Goulburn, E.N.E., 8, dull, temperature 68°; Menindie, N.W., 28, cloudy, temperature 91°; Moruya, N.E., 24, fine, smooth sea, temperature 72°; Newcastle, S.E., 8, fine, smooth sea, temperature 71°; Port Macquarie, S.S.W., 14, showery, smooth sea, temperature 74°; Sydney, E., 13, scattered clouds, smooth sea, temperature 70°; Wentworth, N.E., 28, fine, temperature 98°; Walgett, S.S.W., looks like thunderstorm to south, temperature 59°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 3 inches above summer level; at Hay, below summer level; at Balranald, summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 4 feet 6 inches above summer level. Darling: At Wentworth, 5 feet 2 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 15.

Sun rises at 4.45, sets at 7.5; Moon, 12.25 p.m.; Mercury, 5.32 a.m., 7.48 p.m.; Venus, 8.19 a.m., 10.17 p.m.; Mars, 11.56 p.m., 11.17 a.m.; Jupiter, 12.35 a.m., 12.42 p.m.; Saturn, 7.51 p.m., 5.45 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 15: 1.14 a.m. and 1.41 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 15, 1888.

Stations	Wt	Mx	Mn	R'in
Albury	b	95	65	0
Armidale	c	68	54	0·48
Balranald	u	110	63	0·33
Bathurst	u	72	56	0·29
Bend'm'r	u	78	53	0
Bodalla	—	—	—	—
Bourke	b	107	63	0
C'md'n H.	u	80	66	0·21
C. St. Geo.	c	79	63	0
Cacoor	b	85	59	0·10
Casino	r	94	66	0·29
Cassilis	—	—	—	—
Clarence	r	85	64	0·13
C'ad'lbin	b	75	54	0
Cooma	b	84	51	0
Cootam'n	c	88	63	0·45
Cram'ne	b	—	—	0·23
Cowra	b	84	53	0
Deniliq'n	b	103	56	0
Dub.	b	98	62	0
Eden	u	73	61	0
Euston	c	105	76	0
Forbes	b	82	61	0
Gil'n Inn's	u	67	53	0·60
Goulburn	c	76	55	0
Grafton	u	85	65	0·18
Grong	c	73	67	0·58
Gunned'h	b	88	64	0
Hay	b	101	61	0·43
Hill End	c	—	—	1·11
Inverell	c	76	56	0·27
Kiandra	c	75	41	0·32
Lismore	r	89	67	0
Maitland	c	83	66	0
Marsdens	b	90	67	0
Menindie	u	100	78	0
Mólong	b	78	52	0
Moree	u	88	61	0·04
Moruya	b	78	60	0
Moss Vale	r	70	58	0·03
Mt. Hope	b	91	72	0
M. Victoria	u	71	53	0·13
Mudgee	c	74	53	1·70
M'rr'mb'h	c	88	62	0·58
M'r.r'ndi	b	79	63	0·10
Mus'lbr'k	b	82	58	0·04
Narrabri	b	99	68	0·07
Newcastle	b	77	65	0·12
Nowra	—	—	—	—
Orange	c	70	51	0
Picton	r	76	64	0·13
P. M'q'rie	p	73	65	0·38
P.St'ph'ns	b	82	61	0·05
Q'nbeyan	c	76	58	0
Quirindi	c	87	61	0·82
Singleton	g	78	57	0·50
SYDNEY	u	74	65	0·20
Tamw'rth	c	73	57	0
Taralga	b	72	52	0
Taree	r	73	67	0·16
T'nt'rfield	u	78	56	1·64
Wagga	b	96	65	0
Walcha	g	63	54	0·10
Walgett	b	100	62	0
W'ntw'rth	b	108	80	0
Wilcannia	b	—	—	0
W'll'ng'ng	p	76	63	0·50
Young	b	92	56	0

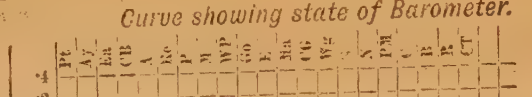
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S., LONGITUDE [illegible] 50·1s. E.

Average Annual Rainfall for 26 years ... 50·13
Average for 27 years from [illegible] November 30 [illegible]
Total Rainfall from January 1st to December 15, [illegible]
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. — Clo wind E.
T. storm, wind S. — Rain, wind W.
If it is CALM, the symbol is used without the arrow.
Smooth sea.
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



TIME BALL
Dropsat 1 p.m. S.M.T.
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E

Barometers fallen about 0·10 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, storm or fog in the sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; R'n the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay. Albany; Ba. Bunbury; CB. Cape Bernouilli; A. Adelaide; Re. Robe; P. Portland; M. Melbourne; W.P. Wilson's Promontory; Ge. Gabo; E. Eden; Ma. Moruya; C.G. Jervis Bay; Wg. Wollongong; S. Sydney; N. Newcastle; P.M. Port Macquarie; C. Clarence River; B. Brisbane; R. Rockhampton; Ck. Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve shows rise at a glance to trace the depressions, beginning with Western Australia and passing eastwards, northerly winds preceding them and southerly following.

South Australia reports weather generally fine and hot, prevailing winds N.E. to N., and calm inland, and S.W. to S.E. on and near coast; smooth sea, barometer rising, no rain.

Victoria.—Generally cloudy, with light variable winds; smooth sea and steady barometer on coast; dense fog at Wilson's Promontory; fine but cloudy, with light N. wind, inland at Echuca; no rain.

New Zealand.—Russell, barometer 30·10, wind S.W., cloudy; Wellington, barometer 30·10, wind S.W., cloudy; Bluff, barometer 30·10, wind W, 23, fine but cloudy. High sea at Gisborne.

New South Wales.—Generally cloudy and unsettled on coast and mountains, with rain at places, and light S.E. to N.E. winds and falling barometer. Fine and clear inland, winds more northerly and calm in places, barometer rising.

Queensland.—Cloudy on E. coast, with S.E. winds and calms, and smooth sea. Rainfall—Brisbane, 1·32; Cape Moreton, 0·55.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 13, cloudy, temperature 88°; Cape Otway, cloudy, smooth sea, temperature 88°; Lakes Entrance, E., 8, dense fog, very smooth sea, temperature 76.; Wilson's Promontory, N.E., 18, dull, smooth sea, temperature 77°.

New South Wales.—Albury, W., fine, hot, temperature 84°; Cape St. George, N.E., 14, fine, temperature 76°; Deniliquin W., fine, temperature 93°; Dubbo, E.S.E., 14, fine, temperature 80°; Eden, N.E., 28, fine, slight sea, temperature 73°; Goulburn, E., 14, fine, temperature 71°; Menindie, calm, hot, temperature 90°; Moruya, N.E., 12, fine, smooth sea, temperature 75°; Newcastle, N.E., 14, fine, no sea, temperature 74°; Port Macquarie, N.E., 14, fine, sultry, smooth sea, temperature 78°; Sydney, E.S.E., 8, scattered clouds, smooth sea, temperature 73°; Wentworth, N., fine, hot, temperature 98°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 1 inch above summer level; at Hay, below summer level; at Balranald, 2 inches above summer level. Murray: At Albury, 1 foot 4 inches above summer level; at Euston, 4 feet 4 inches above summer level. Darling: At Wentworth, 4 feet 7 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

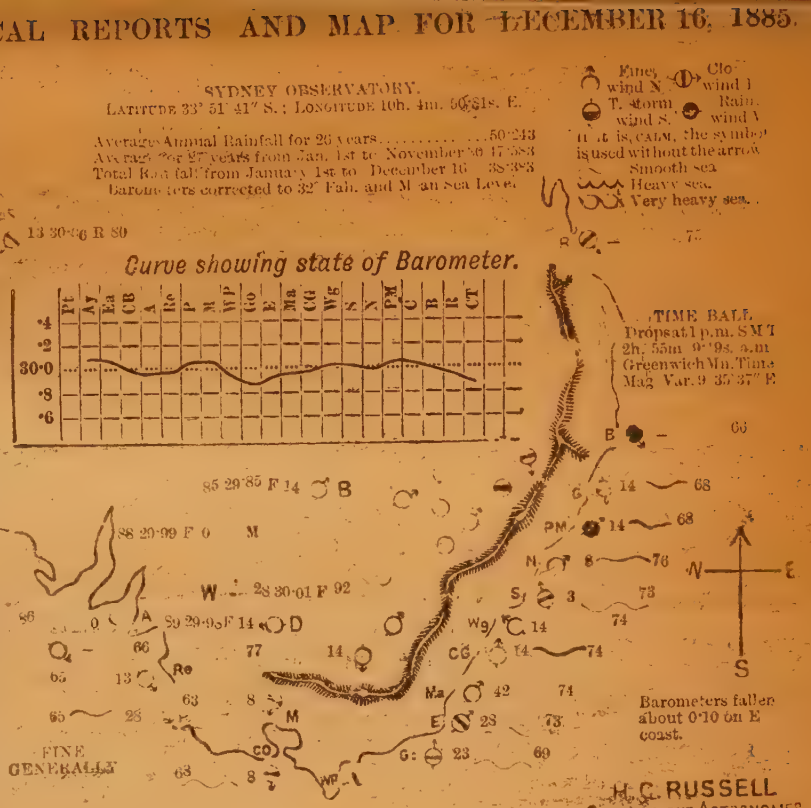
ASTRONOMICAL MEMORANDA FOR DECEMBER 16.

Sun rises at 4.45, sets at 7.6; Moon, 1.21 p.m., sets 12.27 p.m.; Mercury, 5.21 a.m., 7.35 p.m.; Venus, 8.20 a.m., 10.16 p.m.; Mars, 11.53 p.m., 11.15 a.m.; Jupiter, 12.31 a.m., 12.38 p.m.; Saturn, 7.47 p.m., 5.41 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 16: 2.7 a.m. and 2.39 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 16, 1885.

Stations	wt	Mx	Mn	a'in
Albury	c	98	66	0
Armidale	c	73	56	0·01
Balranald	b	113	58	0
Bathurst	b	81	55	0·82
Bend'm'r	u	75	54	0
Bodalla	c	82	75	0
Bourke	b	107	67	0
C'nid'n H.	u	78	67	0
C. St. Geo.	b	80	61	0
Carcoar	b	77	61	0·01
Casino	p	79	63	0·73
Cassilis	b	79	66	0
Clarence	a	85	65	1·14
C'nd'b'lin	—	—	—	—
Cooma	b	91	53	0·16
Coonab'n	c	86	57	0
C'namble	b	—	—	0
Cowra	b	82	75	0
Deniliq'n	b	105	68	0
Dubbo	b	92	64	0
Eden	c	76	61	0
Euston	c	109	65	0
Forbes	b	94	65	0
Gl'n Inn's	d	72	55	0·25
Goulburn	b	82	52	0
Grafton	p	77	66	0·26
Gulgong	b	78	57	0
Gunned'h	b	90	65	0
Hay	b	102	68	0
Hill End	b	—	—	0·08
Inverell	u	76	59	0·07
Kiandra	b	77	40	0·28
Lismore	p	77	68	1·02
Maitland	c	84	70	0
Marsdens	b	98	73	0
Menindie	b	99	76	0
Molong	b	93	59	0
Moree	b	89	63	0
Moruya	b	81	62	0
Moss Vale	b	74	58	0·03
Mt. Hope	b	92	74	0
M. Vict'ria	c	70	50	0·30
Mudgee	b	85	56	0
M'rr'mb'h	b	93	65	0
M'rr'ndi	c	79	60	0
Mus'lbr'k	b	93	60	0·02
Narrabri	b	94	66	0
Newcastle	b	79	68	0
Nowra	—	—	—	—
Orange	b	77	50	0
Picton	c	76	62	0·32
P. M'q'rie	p	84	64	0·43
P.St'ph'ns	c	84	62	0
Q'nbeyan	b	81	61	0
Quirindi	b	83	59	0
Singleton	b	80	64	0·07
SYDNEY	g	75	65	0
Tamw'rth	b	82	59	0
Taralga	b	74	52	0
Taree	r	81	63	0·50
T'nt'rfield	u	74	56	0·82
Wagga	b	101	66	0
Walcha	o	70	54	0·10
Walgett	b	95	68	0
W'ntw'rth	c	107	72	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	80	64	0·02
Young	b	96	61	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r n, the rainfall for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Below and the state of barometers is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light E. and S.E. winds, and smooth sea. No rain.

South Australia reports weather generally sultry, with scattered clouds. Dull between Farina and Powell's Creek. Prevailing winds, S.W. to S.E., generally light, but fresh to strong in places. Rainfall: Port Darwin, 0·22.

Victoria.—Generally cloudy, with light southerly winds and calms, and slowly rising barometers. Smooth sea on coast. Dense fog at Wilson's Promontory. Rainfall: Cape Otway, 0·03.

Tasmania.—Low Heads, foggy, wind N.N.E., barometer 29·97, temperature 65°; Talmouth, dull, wind S., 18, barometer 30·04, temperature 58°. Rain: Low Heads, 0·01.

New Zealand.—Russell, barometer 30·20, wind calm, fine; Wellington, barometer 30·00, wind N.E., dull; Bluff, barometer 30·00, wind N.W., fine but cloudy.

New South Wales.—Generally fine and clear. Dull weather with rain in places in the N.E. part of colony; prevailing winds N.E. and calm; barometers falling, sea smooth. Full details in map above.

Queensland.—Cloudy and showery in the S.E.; fine in N.; winds S.E. to N.E. and calm, sea moderate. Rainfall: Brisbane, 0·56; Cape Moreton, 0·11; Rockhampton, 0·66.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 13, cloudy, temperature 68°; Cape Otway, S.E., 8, cloudy, moderate sea, temperature 71°; Portland, S.E., 34, fine, slight sea, temperature 65°; Wilson's Promontory, E.N.E., 13, sultry, smooth sea, temperature 69°; Lakes Entrance, W.S.W., 8, cloudy, smooth sea, temperature 70°.

New South Wales.—Albury, S., very close, temperature 66°; Cape St. George, N.N.E., 28, fine, smooth sea, temperature 74°; Deniliquin, W.W., 14, fine, hot, temperature 95°; Dubbo, N.E., 14, fine, temperature 83°; Eden, N.N.E., 14, fine, slight sea, temperature 73°; Goulburn, E., 14, fine, temperature 71°; Menindie, calm, fine, hot, temperature 93°; Moruya, N.E., 42, fine, smooth sea, temperature 74°; Newcastle, N.E., fine, no sea, temperature 74°; Port Macquarie, N.E., sultry, smooth sea, temperature 79°; Sydney, E., 8, fine, smooth sea, temperature 75°; Wentworth, N., fine, temperature 55°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 11 inches above summer level; at Hay, below summer level; at Balranald, 2 inches below summer level. Murray: At Albury, 1 foot above summer level; at Euston, 2 feet 2 inches above summer level. Darling: At Wentworth, 4 feet 4 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

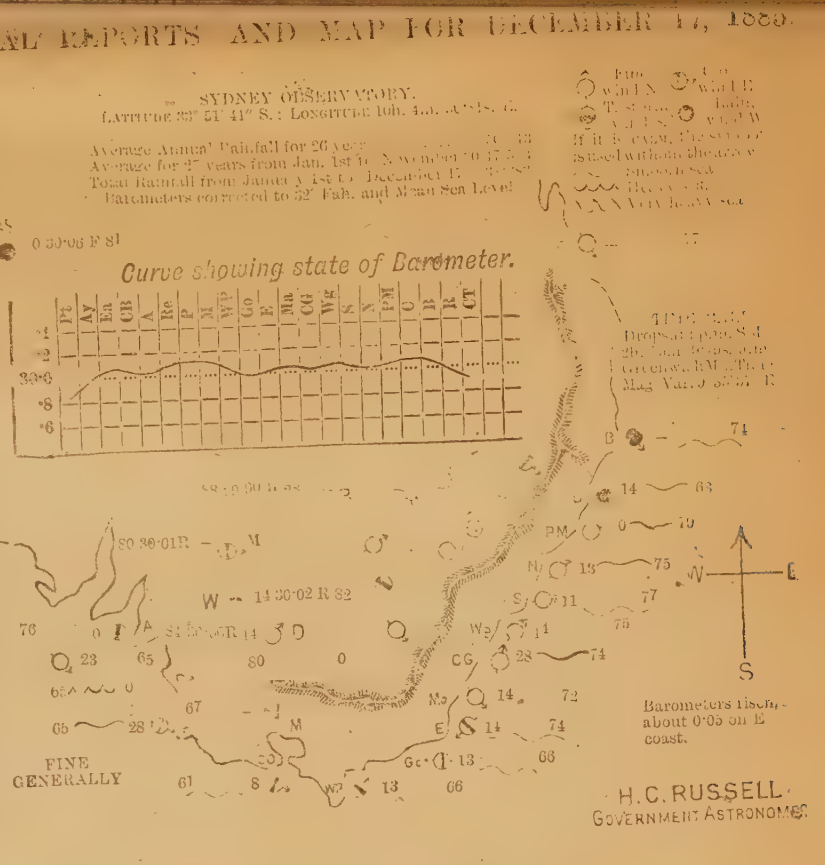
ASTRONOMICAL MEMORANDA FOR DECEMBER 17.

Sun rises at 4.46, sets at 7.7; Moon, 2.20 p.m., sets 1.1 a.m.; Mercury, 5.11 a.m., 7.23 p.m.; Venus, 8.21 a.m., 10.15 p.m.; Mars, 11.50 p.m., 11.13 a.m.; Jupiter, 12.28 a.m., 12.35 p.m.; Saturn, 7.42 p.m., 5.36 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 17: 3.11 a.m. and 3·46 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 17, 1888.

Stations	wt	Mx	Mn	R'in
Albury	b	101	68	0
Armidale	b	72	57	0·69
Balranald	b	111	60	0
Bathurst	c	85	58	0
Bend'm'r	b	75	55	0
Bodalla ...	b	83	39	0·02
Bourke ...	b	103	73	0
C'md'n H.	b	79	67	0·35
C. St. Geo.	b	70	64	0
Carcoar ...	b	80	66	0
Casino ...	c	81	65	0
Cassilis ...	b	82	65	0
Condobolin	r	79	46	0·16
Cooma ...	c	90	54	0
Cootamundra	c	88	58	0
Corowa ...	b	86	79	0
Deniliq'n	b	107	64	0
Dubbo ...	b	96	65	0
Eden ...	f	79	67	0
Euston ...	b	114	67	0·19
Forbes ...	b	95	69	0
Gl'n Inn's	u	67	55	0·25
Goulburn	b	90	57	0
Grafton ...	r	84	68	0·40
Gulgong	b	82	64	0
Gunned'h	b	92	69	0
Hay ...	c	106	68	0
Hill End	b	—	—	0
Inverell ...	c	76	59	0
Kiandra	c	77	48	0
Lismore	c	78	69	0·43
Maitland	b	92	72	0
Marsdens	b	96	77	0
Menindie	c	101	82	0
Molong ...	b	94	63	0
Moree ...	c	92	67	0
Moruya ...	b	78	43	0
Moss Vale	c	80	61	0
Mt. Hope	b	95	78	0
M. Vict'ria	b	85	56	0
Mudgee ...	c	92	59	0
M'rr'mb'h	b	94	70	0
M'rr'r'ndi	b	82	62	0·24
Mus'lbr'k	b	94	62	0·02
Narrabri	b	105	71	0·17
Newcastle	b	77	68	0
Nowra ...	—	—	—	—
Orange ...	c	81	57	0
Picton ...	c	84	62	0
M'q'rie	b	82	64	0·26
Sulphur's	u	86	65	0
Omeo ...	c	89	63	0
Quirindi	b	86	62	0
Singleton	b	98	88	0
Sydney ...	b	78	65	0
Tamw'rth	—	—	—	—
Taralga ...	b	88	49	0
Tarcutta ...	c	89	44	0·40
Tat'field	c	76	58	0·10
Wagga ...	c	101	67	0
Walcha ...	c	72	54	0
Walgett ...	b	97	69	0
W'ntw'rth	c	107	73	0·40
Wilcannia	b	—	—	0
W'll'ng'ng	b	81	63	0
Young ...	g	98	66	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, clouding for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; s, threatening; m, misty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder, u, lowers. The next column, M'x gives the maximum temperature for previous 24 hours, M'n the corresponding minimum temperature; R'in, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane, pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea, and lastly, figures denoting the temperature of the sea. The barometer curve shows the state of barometers along the east coast, from Perth to Cooktown. Perth, Ay, Albany; Ea, Eucla; Ce, Cape Leeuwin; A, Adelaide; Ec, Echuca; P, Portland; M, Melbourne; W P, Wilson's Promontory; Ge, Geelong; L, Lorne; Ma, Mallacoota; Co, Cape Otway; Bay, Westernport; S, Sydney; N N, Newcastle; P M, Port Macquarie; C, Cape Byron; Ri, Richmond River; P, Ballina; R, Rockhampton; Ck, Cooktown. The state of the sea is given by figures at Albany, Adelaide, Wilson's Promontory, Port Macquarie, Cape Byron, and Cooktown. The barometer curve commences at Albany, and passes along eastwards, by Eucla, Adelaide, Wilson's Promontory, and Port Macquarie, to Cooktown, beginning with Western Australia and passing along eastwards, by Eucla, Adelaide, Wilson's Promontory, and Port Macquarie, to Cooktown, beginning with Western Australia and passing along eastwards, by Eucla, Adelaide, Wilson's Promontory, and Port Macquarie, to Cooktown, preceding them and southerly following.

Western Australia.—Generally fine, but cloudy, with light S.W. wind and smooth sea. No rain.

South Australia reports weather generally fine, but cloudy and sultry. Rainfall at Alice Springs. Thunderstorms, with steady rain yesterday along railway between Hallett and Carrieton, measuring from 0·30 to 0·90. Prevailing winds, S. to S.E. and light fresh to strong inland. Barometers rising. Rainfall: Port Darwin, 0·20; Tennant's Creek, 0·09; Peake, 0·01.

Victoria.—Generally cloudy on coast, with light variable winds, moderate sea, and rising barometers. Foggy at Cape Otway. Light southerly wind and fine inland at Echuca. No rain.

Tasmania.—Hazy on north coast, with light W.N.W. wind.

New Zealand.—Russell, barometer 30·20, wind N.W., dull; Wellington, barometer 29·90, wind N.E., fine; Bluff, barometer 30·00, wind S.W., fine.

New South Wales.—Generally fine and clear; still cloudy in N.E. of colony; light rain falling at Clarence River Heads. Prevailing winds E. and N.E.; sea smooth; barometer steady, and very warm weather generally. Albury reports storm at night, with lightning, but no rain. Full details in map above.

Queensland.—Fine and sultry in N., dull and showery in S. Prevailing winds S.E.; sea moderate. Rainfall: Brisbane, 0·47; Cape Moreton, 1·68; Rockhampton, 0·36.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 12, cloudy, barometers steady, temperature 70°; Cape Otway, E., 6, dense fog, moderate sea, temperature 72°; Portland, S.E., 30, cloudy, smooth sea, temperature 67°; Wilson's Promontory, N.E., 24, squally, smooth sea, temperature 74°.

New South Wales.—Albury, S.E., cloudy, hot, temperature 88°; Deniliquin, E., fine, temperature 94°; Dubbo, calm, fine, temperature 86°; Eden, E.S.E., 14, fine, slight sea, temperature 68°; Goulburn, E.N.E., fine, temperature 77°; Menindie, calm, cloudy, sultry, temperature 94°; Moruya, N.E., 28, fine, moderate sea, temperature 75°; Newcastle, N.E., 13, fine, no sea, temperature 75°; Port Macquarie, N.E., 14, sultry, smooth sea, temperature 82°; Sydney, E., 13, fine, smooth sea, temperature 76°; Wentworth, S.W., 14, sultry, temperature 85°; Walgett, E.S.E., fine and hot, temperature 95°.

STATE OF RIVERS.

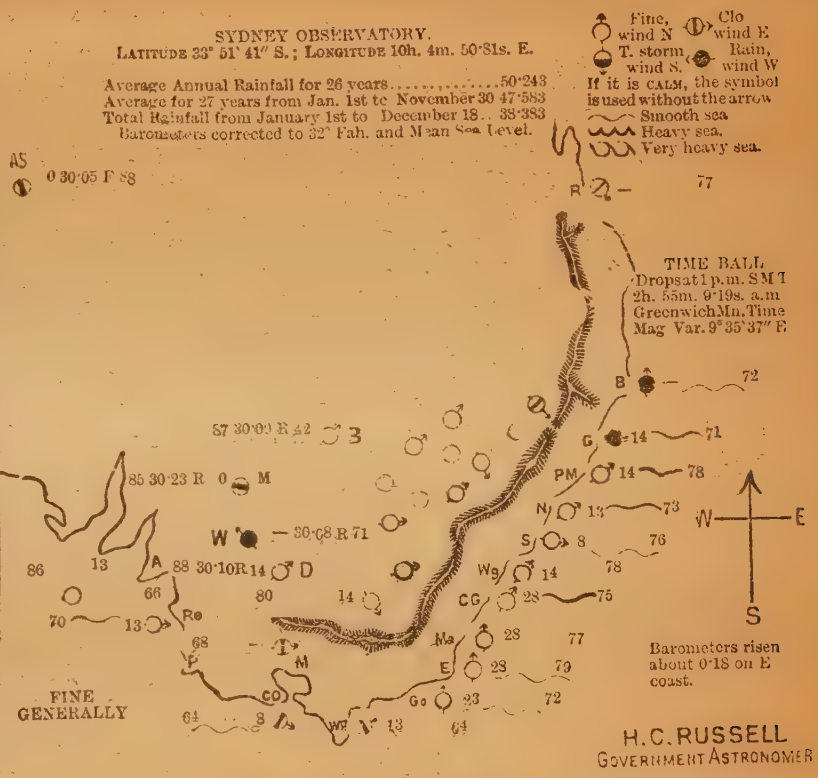
Murrumbidgee: At Wagga, 1 foot above summer level; at Hay, summer level; at Balranald, 4 inches below summer level. Murray: At Albury, 10 inches above summer level: at Euston, 4 feet above summer level. Darling: At Wentworth, 4 feet 6 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 18.

Sun rises at 4.46, sets at 7.7; Moon, 3.21 p.m., sets 1.36 a.m. Mercury, 5.0 a.m., 7.10 p.m.; Venus, 8.22 a.m., 10.14 p.m.; Mars, 11.47 p.m., 11.11 a.m.; Jupiter, 12.24 a.m., 12.31 p.m.; Saturn, 7.38 p.m., 5.32 a.m. New moon, 6th; full moon, 22nd. High water at Fort Denison: 4.20 a.m. and 4.57 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 18, 1885

Stations	wt	Mx	Mn	R'in
Albury	c	101	57	0
Armidale	b	76	59	0
Balranald	g	111	69	0
Bathurst	b	85	59	0·01
Bend'm'r	g	80	57	0
Bodalla ..	–	—	—	—
Bourke ..	b	105	70	0
C'md'n H.	b	81	69	0·07
C. St. Geo.	b	77	66	0
Carcoar ..	b	83	69	0
Casino ..	b	85	36	0·08
Cassilis .	b	83	70	0
Clarence	r	89	68	0·68
C'nd'b'lin	b	81	63	0
Cooma ..	c	92	52	0
Coonab'n	b	94	61	0·04
C'nam ble	b	–	—	0
Cowra ..	b	87	79	0
Deniliq'n	c	108	68	0
Dubbo ..	b	99	69	0
Eden	c	80	66	0
Euston ..	u	110	73	0
Forbes ..	b	99	71	0
Gl'n Inn's	u	77	58	0·01
Goulburn	b	89	57	0
Grafton ..	p	80	69	0·47
Gulgong	b	84	66	0
Gunned'h	b	96	70	0·20
Hay	b	105	79	0
Hill End	b	—	—	0
Inverell ..	o	80	62	0
Kiandra	b	76	49	0
Lismore	p	81	71	0·38
Maitland	c	94	76	0
Marsdens	b	97	78	0
Menindie	t	103	80	0
Molong ..	b	96	61	0·02
Moree ..	c	90	69	0
Moruya ..	c	81	61	0
Moss Vale	u	81	61	0
Mt. Hope	b	94	73	0
M. Vict'ria	g	73	55	0·07
Mudgee ..	b	91	59	0
M'rr'mb'h	b	97	68	0
M'rr'r'ndi	b	82	64	0
Mus'lbr'k	b	98	65	0
Narrabri	b	98	58	0
Newcastle	b	77	68	0
Nowra ..	g	84	64	0
Orange ..	b	84	58	0
Picton ..	c	83	66	0
P. M'q'rie	b	85	65	0·74
P.St'ph'ns	–	—	—	—
Q'nbeyan	c	88	65	0
Quirindi	b	87	61	0
Singleton	b	90	67	0
SYDNEY ..	c	79	70	0
Tamw'rth	b	87	62	0
Taralga ..	b	88	51	0
Taree	b	89	68	0
T'nt'rfield	u	77	60	0·18
Wagga ..	b	101	68	0
Walcha ..	g	76	54	0·06
Walgett ..	b	99	62	0
W'ntw'rth	r	103	71	0·02
Wilcannia	b	—	—	0
W'll'ng'ng	b	83	66	0
Young ..	b	99	65	0



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth, Ay. Albany; Ea. Eucla, CB Cape Borda, A. Adelaide, Ro. Robe; P. Portland; M. Melbourne, WP Wilson's Promontory, Gc. Gabo; E. Eden; Ma. Moruya; CG Jervis Bay, Wg. Wollongong, S. Sydney, N. Newcastle, PM Port Macquarie; C. Clarence River, B. Brisbane; R. Rockhampton; Ct Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing away eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Generally cloudy, with light S.W. winds; fine in places, sea smooth, no rain.

South Australia reports weather generally fine, and hot and sultry; scattered clouds north of Jamestown and on parts of coast; prevailing winds S.E. to E., and light steady barometers, and light variable winds and smooth sea on coast. Rainfall: Port Darwin, 0·48; Tennant's Creek, 0.10.

Victoria.—Generally cloudy on coast, with light E. wind, smooth sea, and rising barometers; fine but cloudy inland at Echuca, with fresh S.E. breeze; dense fog at Wilson's Promontory; foggy at Cape Otway; no rain.

Tasmania.—Hazy on N. coast, with light N.N.W. wind.

New Zealand.—Russell, barometer 30·40, calm, fine; Wellington, barometer 30·20, wind S.W., half cloudy; Bluff, barometer 30·20, wind W., fine.

New South Wales.—Generally fine, prevailing winds N.E. to S.E., and calm. Barometers rising. Dull in the N.E. of colony; raining in places. See map. Light rain falling at Wentworth. Fine on coast south of Port Macquarie, with light N.E. winds and rising barometer. Full details in map above.

Queensland.—Cloudy on E. coast; showery at Brisbane, winds S.E. and E., sea moderate. Rainfall: Brisbane, 0·22; Cape Moreton, 0·18.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S.S.W., 13, fine, temperature 75°; Portland, E.S.E., 34, fine, smooth sea, temperature 68°; Wilson's Promontory, E.N.E., 23, misty, smooth sea, temperature 72°.

New South Wales.—Albury, S.W., fine, very hot, temperature 88°; Cape St. George, N.N.E., 28, fine, moderate sea, temperature 74°; Deniliquin, N.E., 14, fine, clear, temperature 94°; Dubbo, N.E., fine, temperature 87°; Eden, N.E., 14, fine, smooth sea, temperature 75°; Goulburn, E.N.E., 14, fine, temperature 77°, Menindie, S.E., 28, cloudy, temperature 85°; Moruya, N.E., 42, fine, smooth sea, temperature 76°; Newcastle, N.E., fine, smooth sea, temperature 72°; Port Macquarie, E., 14, fine, smooth sea, temperature 82°; Sydney, E., 20, fine, smooth sea, temperature 76°; Wentworth, S.E., showery, temperature 69°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 2 inches above summer level; at Hay, below summer level; at Balranald, 4 inches below summer level. Murray: At Albury, 9 inches above summer level; at Euston, 3 feet 10 inches above summer level. Darling: At Wentworth, 4 feet 1 inch above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 19.

Sun rises at 4.47, sets at 7.8; Moon, 4.24 p.m., sets 2.17 a.m. Mercury, 4.50 a.m., 6.58 p.m.; Venus, 8.23 a.m., 10.13 p.m.; Mars, 11.44 p.m., 11.9 a.m.; Jupiter, 12.20 a.m., 12.28 p.m.; Saturn, 7.34 p.m., 5.28 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 3.33 a.m. and 6.4 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 19, 1885.

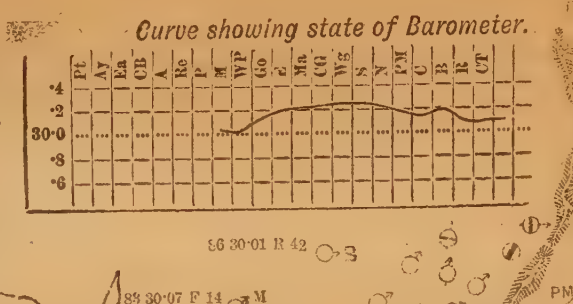
Stations	wt	M	m	r
Albury	b	101	76	0
Armidale	c	75	57	0·35
Balranald	c	101	59	0·18
Bathurst	c	87	69	0
Bend'm'r	u	82	57	0
Bod[illegible]	c	85	43	0
Bourke ..	b	106	73	0
C'nd'n H.	b	83	71	--
C.St.Geo.	-	—	—	0
Carcoar ..	b	80	63	0
Casino ..	c	80	61	0·49
Cassilis .	b	86	69	0
Clarence	b	84	68	0·20
C'nd'b'lin	b	80	60	0
Cooma ..	b	91	56	0
Coonab'n	c	92	65	0
C'namble	b	--	--	0
Cowra ..	b	89	—	0
Deniliq'n	c	104	66	0·18
Dubbo ..	b	97	67	0
Eden	c	79	67	0
Euston ..		90	67	0
Forbes ..	b	97	69	0
Gl'n Inn's	u	77	60	0·02
Goulburn	b	88	59	0
Grafton ..	u	82	67	0·65
Gulgong	b	84	65	0
Gunned'h	c	97	70	0
Hay	b	105	76	0
Hill End	b	—	—	0
Inverell ..	c	83	63	0
Kiandra	b	79	48	0
Lismore	p	81	67	0·19
Maitland	u	91	76	0
Marsdens	b	95	79	0
Menindie	c	90	76	0
Molong ..	b	94	63	0
Moree ..	c	92	69	0
Moruya ..	g	80	63	0
Moss Vale	c	79	62	0
Mt. Hope	b	89	76	0
M. Vict'ria	r	80	55	0
Mudgee ..	c	92	58	0
M'rr'mb'h	b	96	67	0
M'rr'r'ngi	c	81	61	0·82
Mus'lbr'k	c	96	64	0
Narrabri	g	100	68	0
Newcastle	c	76	68	0
Nowra ..	-	--	—	—
Orange ..	b	83	57	0·25
Picton ..	u	83	68	0
P. M'q'rie	c	82	67	0·14
P.St'ph'ns	-	—	—	--
Q'nbeyan	g	85	63	0
Quirindi	b	88	61	0
Singleton	g	88	76	0
SYDNEY ..	g	78	68	0·02
Tamw'rth	c	89	59	0
Taralga ..	b	87	60	0
Taree	c	87	71	0·03
T'nt'rfield	c	74	58	0
Wagga ..	b	98	69	0
Walcha ..	u	74	55	0·03
Walgett ..	b	98	72	0
W'ntw'rth	g	86	53	0·18
Wilcannia	b	—	—	0
W'll'ng'ng	b	83	67	0·02
Young ..	b	98	62	0

SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 42″ S.: LONGITUDE [illegible] E.

Average Annual Rainfall for 26 years ..... [illegible]
Average for 27 years from Jan. 1st to November 30 [illegible]
Total Rainfall from January 1st to December 1st [illegible]
Rain readings corrected to 32° Fah. and Mean Sea Level.

Fine; wind E. Cloudy; wind E. T. storm; wind S. Rain; wind W. If it is calm the symbol is used with direction of wind. Fog at sea. Heavy sea. Very heavy sea.



TIME BALL
Drops at 1 p.m. S.M.T.
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E.

FINE GENERALLY

Barometers risen about 0·05 on E. coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the marg'n. At each coast station the wind symbol is placed like a vane; pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures showing the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature [illegible]. The barometer curve shows the state of barometers along the coast from [illegible] Cooktown [illegible] Port, Ay Albury, Ea Eucla, CB Cape Beatty, A Adelaide, Re Robe, P Portland, M Melbourne, WP Wilson's Promontory, Go Gabo, E Eden, Ma Moruya; CG Cape Hay, Wg Wollongong, S Sydney, N Newcastle, PM Port Macquarie; C Clarence River, B Brisbane, R Rockhampton, [illegible] Cooktown. Intermediate places are given in [illegible] Albury, Bendigo, Wentworth, Menindie, [illegible] Spring. The barometer curve enables one at a glance to trace [illegible], beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Generally cloudy and warm; wind, N.E. to E.S.E. Rain has fallen in the northern part of the colony, amounting to from 0·20 to 1·33.

Victoria.—Generally cloudy, with fresh N.E. winds and falling barometers; smooth sea on coast; no rain; sultry at Melbourne; dense fogs at Wilson's Promontory, Lake Entrance, and Cape Otway.

Tasmania.—Hot N.E. wind and hazy on N. coast; no rain.

New Zealand.—Russell, wind N.E. light, barometer, 30·30, weather fine but cloudy; Wellington, wind N.E. light, barometer 30·10, weather fine and clear; Bluff, wind S.W. light; barometer 30·20, weather fine but cloudy.

New South wales.—Cloudy in places on coast, showery at Lismore; cloudy generally on mountains, with N.N.E. and N.E. winds, also cloudy in places on and near Victorian borders. Smooth sea, rising barometers, and light N.E. winds and calms on coast. Full details in map above.

Queensland.—Generally cloudy on E. coast, with light N.E. to S.E. winds and moderate sea. Rainfall: Brisbane, 0·35 (falling lightly); Cape Moreton, 0·25 (falling lightly); Rockhampton, 0.13 (and still falling). No rain report further N. than Rockhampton, but clouds extend N. as far as Cooktown.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, E., 14, fine, temperature 84°; Cape St. George, N., 42, fine, temperature 74°; Clarence River, S.S.E., cloudy, smooth sea, temperature 79°; Deniliquin, N.E., stormy looking; Dubbo, E., 14, fine, temperature 84°; Eden, N.E., fine, little sea, temperature 74°; Goulburn, E.N.E., fine, temperature 76°; Moruya, N.E., 42, fine, smooth sea, temperature 74°; Newcastle, N.E., 20, fine, smooth sea, temperature 73°; Port Macquarie, E., 14, fine, smooth sea, temperature 73°; Sydney, N.E., 20, fine, clear, smooth sea, temperature 76°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 1 foot 2 inches above summer level; at Hay, below summer level; at Balranald, 4 inches below summer level. Murray: At Albury, 8 inches above summer level; at Euston, 3 feet 8 inches above summer level. Darling: At Wentworth, 3 feet 9 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 21.

Sun rises at 4.47, sets at 7.9; Moon, 6.33 p.m., sets 3.52 a.m. Mercury, 4.29 a.m., 6.33 p.m.; Venus, 8.26 a.m., 10.10 p.m.; Mars, 11.38 p.m., 11.4 a.m.; Jupiter, 12.13 a.m., 12.21 p.m.; Saturn, 7.25 p.m., 5.19 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 7.32 a.m. and 7.58 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 21, 1889.

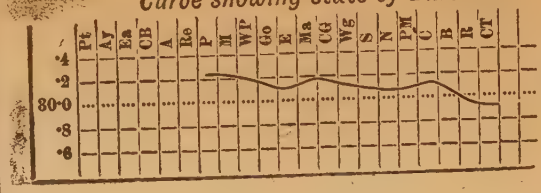
Stations	wt	Mx	Mn	R'in
Albury	h	99	70	0·17
Armidale	b	80	57	0
Balranald	g	86	50	0·60
Bathurst	c	91	57	0
Bend'm'r	b	82	54	0·22
Bodalla ..	–	–	–	–
Bourke ..	r	93	72	0·17
C'md'n H.	b	81	67	0
C. St. Geo.	c	94	60	0
Carcoar ..	g	83	63	0
Casino ..	b	86	61	0
Cassilis ..	b	83	67	0·03
Clarence	c	88	67	0
C'nd'b'lin	u	78	57	0·14
Cooma ..	g	94	56	0·07
Coonab'n	b	93	56	0·02
C'nam ble	b	--	--	0
Cowra ..	c	88	--	0
Deniliq'n	c	96	55	1·30
Dubbo ..	b	97	68	0·02
Eden	u	59	40	0·27
Euston ..	u	93	60	0·08
Forbes ..	g	102	67	0
Gl'n Inn's	b	84	53	0
Goulburn	g	98	61	0·63
Grafton ..	b	83	66	0
Gulgong	b	85	64	0
Gunned'h	b	96	70	0·15
Hay	c	103	68	0·06
Hill End	b	—	—	0
Inverell..	b	81	59	0
Kiandra	g	78	50	0·37
Lismore	b	86	68	0
Maitland	b	95	65	0
Marsdens	c	96	76	0·09
Menindie	p	85	71	1·14
Molong ..	–	–	–	--
Moree ..	b	91	68	0
Moruya..	g	76	60	0·15
Moss Vale	r	—	--	—
Mt. Hope	u	92	73	1·25
M. Vict'ria	g	84	54	0
Mudgee..	b	94	59	0
M'rr'mb'h	b	90	72	0·11
M'rr'r'ndi	c	86	61	0·28
Mus'lbr'k	b	103	63	0·14
Narrabri	b	99	68	0·08
Newcastle	b	81	66	0
Nowra ..	u	89	41	0
Orange ..	g	87	61	0
Picton ..	u	88	68	0
P. M'q'rie	b	81	64	0
P.St'ph'ns	b	83	64	0
Q'nbeyan	c	91	63	0·02
Quirindi	b	90	61	0·58
Singleton	b	94	66	0
SYDNEY ..	g	79	68	0
Tamw'rth	b	91	60	0
Taralga ..	d	93	55	0·08
Taree	b	87	60	0·01
T'nt'rfield	c	82	56	0
Wagga ..	b	83	65	0·22
Walcha ..	b	75	52	0
Walgett..	b	103	74	0
W'ntw'rth	g	89	63	1·25
Wilcannia	r	--	--	—
W'll'ng'ng	g	80	66	0
Young ..	c	87	67	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51' 41" S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 21.. 38·405
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Clo wind E
T. storm wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



TIME BALL
Drops at 1 p.m. S.M.T
2h. 55m. 9·19s. a.m
Greenwich Mn. Time
Mag Var. 9° 35' 37" E

Barometers fallen about 0·02 on E coast.

H.C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c. detached clouds; d, drizzling rain; f. fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt. Perth; Ay. Albany; Ea. Eucla, CB. Cape Borda. A. Adelaide. Re. Robe; P. Portland; M. Melbourne, W.P. Wilson's Promontory. Go. Gabo. E. Eden; Ma. Moruya; C.G Jervis Bay; Wg. Wollongong. S. Sydney. N. Newcastle. P.M Port Macquarie; C. Clarence River; B, Brisbane; R. Rockhampton; Ct. Cooktown. Inland the state of barometer is given in figures at Albury Deniliquin. Wentworth. Menindie. Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

Victoria.—Generally fine; misty on coast, with moderate sea (rough at Cape Otway), and rising barometer; fine but cloudy inland at Echuca; dull and calm at Omeo, wind S.E., and light. Heavy rains have fallen in the northern and S.E. parts of colony since Saturday, measuring at Wilson's Promontory, 0·56; Echuca, 1·25; Omeo, 0·20; Lake Entrance, 0·09; Melbourne, 0·38; Portland, 0·06; Cape Otway, 0·01.

Tasmania.—Fine on N. coast, light N.E. wind. Rainfall: Low Heads, 0·85.

New Zealand.—Russell, barometer 30·30; Wellington, barometer 30·00; Bluff, barometer 29·70. Generally fine, with light S.W. winds.

New South Wales.—Cloudy, generally fine in northern parts; prevailing winds S.E. and S., strong on coast, calm in places inland. Heavy rain inland since last report; greatest quantities measured in the districts surrounding the confluence of the Murray and Darling rivers, heaviest falls being at Deniliquin (1.30), Mount Hope (1·25), Menindie (1·14), getting lighter both up the Darling and Murray, measuring only 0·17 at Bourke and 0·17 at Albury; raining steadily at Bourke. (Full details in map above.) Pooncarie reports 0·79 of rain and Temora 0·06.

Queensland.—Generally cloudy and showery, with light S.E. and E.N.E. winds and moderate sea. Rainfall—Brisbane, 0·13; Rockhampton, 0·03; Townsville, 0·26.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 18, cloudy, fine, temperature 66°; Cape Otway, E., 8, fine, rough sea, temperature 65°; Portland E.S.E., 36, fine, smooth sea, temperature 63°; Wilson's Promontory, E.N.E., fine, cloudy, moderate sea, temperature 70°.

New South Wales.—Albury, calm, cloudy, temperature 84°; Cape St. George, S., 56, cloudy, temperature 62°; Deniliquin, S., dull, temperature 85°; Dubbo, S., 14, cloudy, temperature 85°; Eden, S., fine, smooth sea, temperature 65°; Goulburn, S.E., dull, temperature 72°; Newcastle, S., fine, smooth sea, temperature 71°; Sydney, S., 23, cloudy, smooth sea, temperature 69°. The observer at Menindie reports fine soaking rains throughout this district. Much heavier elsewhere than here. At Kinchega, about 10 miles down the river, over 1 inch fell yesterday morning. It is still raining, with every prospect of its continuance.

STATE OF RIVERS.

Murrumbidgee: At Hay, below summer level; at Balranald, 4 inches below summer level. Murray: At Albury, 8 inches above summer level. Darling: At Wentworth, 4 feet 3 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 22.

Sun rises at 4.48, sets at 7.10; Moon, 7.34 p.m., sets 4.49 a.m. Mercury, 4.23 a.m., 6.26 p.m.; Venus, 8.27 a.m., 10.3 p.m.; Mars, 11.35 p.m., 11.2 a.m.; Jupiter, 12.9 a.m., 12.18 p.m.; Saturn, 7.21 p.m., 5.15 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 8.23 a.m. and 8.48 p.m.

METEOROLOGICAL REPORTS AND MAP FOR [illegible]

Stations	wt	Mx	Mn	R'n
Albury	c	93	69	0·03
Armidale	b	85	58	0
Balranald	c	87	53	0·13
Bathurst	c	79	58	1·40
Bend'm'r	b	81	58	0
Bodalla ..	c	72	46	0·15
Bourke ..	r	87	75	0·05
C'md'n H.	b	81	70	0
C. St. Geo.	b	75	60	0·18
C[illegible]oar ..	b	78	63	0
Casino ..	c	86	66	0
Cassilis ..	c	82	69	0
Clarence	c	88	68	0
C'nd'b'lin	u	73	57	0
Cooma ..	g	70	55	0
Coonab'n	g	94	68	0
C'nam'ble	c	--	--	0
Cowra ..	b	90	68	0
Deniliq'n	u	95	59	0
Dubbo .	g	95	69	0
Eden	r	67	62	0·09
Euston ..	c	81	59	0·18
Forbes ..	g	88	65	0
Gl'n Inn's	g	90	60	0
Goulburn	g	69	58	0
Grafton ..	r	89	67	0
Gulgong	c	85	65	0
Gunned'h	c	99	70	0
Hay	r	93	71	0·10
Hill End	b	--	--	0
Inverell ..	b	84	65	0
Kiandra	c	64	53	0
Lismore	c	89	69	0
Maitland	c	88	69	0
Marsdens	u	90	71	0·79
Menindie	–	--	--	--
Molong ..	b	84	64	0
Moree ..	–	--	--	--
Moruya ..	c	76	61	0·11
Moss Vale	u	86	57	0
Mt. Hope	d	77	70	0·17
M. Vict'ria	c	67	57	0
Mudgee ..	g	93	60	0
M'rr'mb'h	b	88	66	0
M'rr'r'ndi	–	--	--	--
Mus'lbr'k	b	93	65	0
Narrabri	–	--	--	--
Newcastle	c	81	65	0
Nowra ..	b	79	61	0·03
Orange ..	c	80	57	0
Picton ..	u	74	65	0·10
P. M'q'rie	b	84	67	0
P.St'ph'ns	b	86	70	0
Q'nbeyan	c	76	63	0
Quirindi	c	86	65	0
Singleton	b	90	71	0
SYDNEY ..	g	72	66	0·28
Tamw'rth	b	92	62	0
Taralga ..	g	69	57	0
Taree	c	92	69	0
T'nt'rfield	u	83	60	0
Wagga ..	b	97	67	0
Walcha ..	c	83	55	0
Walgett ..	b	101	74	0
W'ntw'rth	r	77	64	0·50
Wilcannia	r	--	--	0·95
Will'ng'ng	c	74	65	[illegible]
Young ..	b	90	62	0

SYDNEY OBSERVATORY.

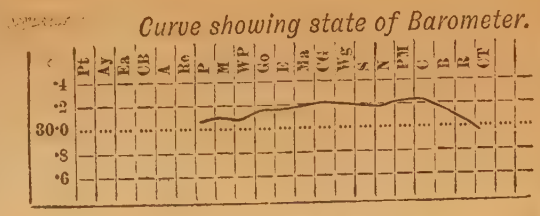
–LATITUDE 33° 51′ 41″ S.; LONGITUDE 10[illegible] [illegible] M. [illegible] E.

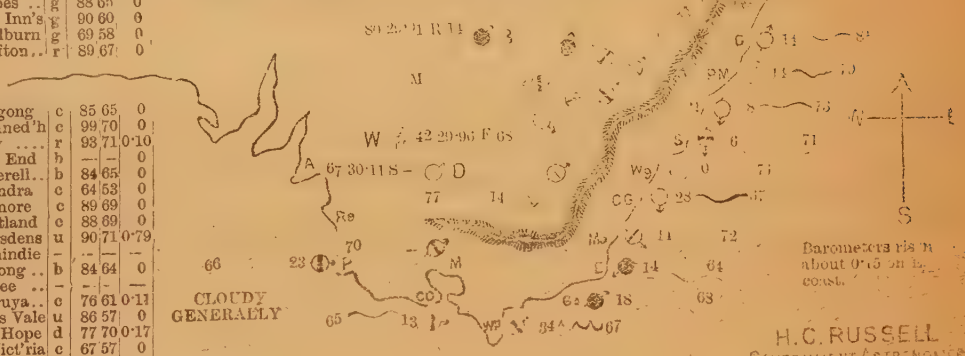
Average Annual Rainfall for 26 years [illegible]

Average for 27 years from Jan. 1st to November 30, [illegible]

Total Rainfall from January 1st to [illegible]

Barometers corrected to 32° Fah. and M[illegible]





NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature; M'n, the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each observatory the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol is placed figures indicating the number of miles the wind is moving per hour. Next, a small square, showing the state of the sea; and, lastly, figures indicating the barometer reading at 9 a.m. The barometer curve shows the state of barometers [illegible] from Perth, to Cooktown – Ba[illegible] Perth; Ay, Albany; Ea, Eucla; CB, Cape Bern[illegible]; A, Adelaide; Re, Port Pirie; P, Portland; M, Melbourne; WP, Wilson's Promontory; [illegible] Port Phillip; Ma, Mackay; CG, Gladstone; Bay, Wg, Wollongong; S, Sydney; N, Newcastle; [illegible] M, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; [illegible] The barometer is given in figures at Albany, Rockhampton, Wilcannia, Morundah, [illegible] Springs. The barometer curve [illegible] at Adelaide [illegible] beginning with Western Australia and passing [illegible] Victoria, [illegible] New South Wales [illegible] preceding them, and southerly to New [illegible]

South Australia.—Light rains in north, excepting Port Darwin, where 1·80 rain has fallen.

Victoria.—Generally cloudy, with light E. and N.E. winds, and in places calm, especially inland; barometer falling; moderate sea; rough at Wilson's Promontory, and falling barometer on coast; no rain.

Tasmania.—Fine on N. coast, with light S. wind.

New Zealand.—Russell, barometer 30·20, wind S.W., fine and clear; Wellington, barometer 30·00, wind N.W., fine and clear; Bluff, barometer 29.80, wind W., fine and clear. Strong wind in squalls on W. coast.

New South Wales.—Generally cloudy, with light S.E. to N.E. winds and calms, and rising barometer. Light rain still falling in far west, very much heavier in some places than in others. Bourke reports 0·05 only, but falling steadily; Balranald, 0·13, drizzling; Hay, 0·10, still falling; Wentworth, 0·50, still falling; Wilcannia, 0·95, still falling; Mount Hope, 0·17, and light rain falling; Marsden, 0·79, and dull; Pooncarie, 0·16, and dull; and Grafton, raining heavily. Smooth sea and light S. and N.N.E. winds on coast. (Full details in map above.)

Queensland.—Generally cloudy on north coast, but no rain falling. Wind S.E. and calm. Sea moderate. Rainfall: Brisbane, 0·30; Rockhampton, 0·17; Townsville, 3·15; Cooktown, 1·90.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, N.E., cloudy, hot, temperature 86°; Cape St. George, S., 28, cloudy, sea moderate, temperature 75°; Deniliquin, W., showery, temperature 77°; Dubbo, N.E., 14, fine, temperature 83°; Eden, N.E., 14, fine, slight sea, temperature [illegible]; Goulburn, E., fine, temperature 76°; Moruya, N.E., 28, cloudy, moderate sea, temperature 73°; Newcastle, N.E., fine, no sea, temperature 79°; Port Macquarie, N.N.E., 28, fine, smooth sea, temperature 80°; Sydney, E.N.E., 13, cloudy, smooth sea, temperature 76°; Walgett, N.E., dull, like rain, temperature 92°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, [illegible] summer level; [illegible] Hay, below summer level; at Balranald, 0 inches above summer level. Murray: At Albury, 8 inches above summer level; at Euston, 3 feet 5 inches above summer level. Darling: At Wentworth, 4 feet 4 inches above summer level; at Pooncarie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 23.

Sun rises at 4.48, sets at 7.10; Moon, 5.31 p.m., sets 5.50 a.m.; Mercury, 4.16 a.m., 6.19 p.m.; Venus, 8.27 a.m., 10.[illegible] p.m.; Mars, 11.32 p.m., 11 a.m.; Jupiter, 12.5 a.m., 12.41 p.m.; Saturn, 7.17 p.m., 5.11 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 9.12 a.m. and 9.35 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 23, 1885.

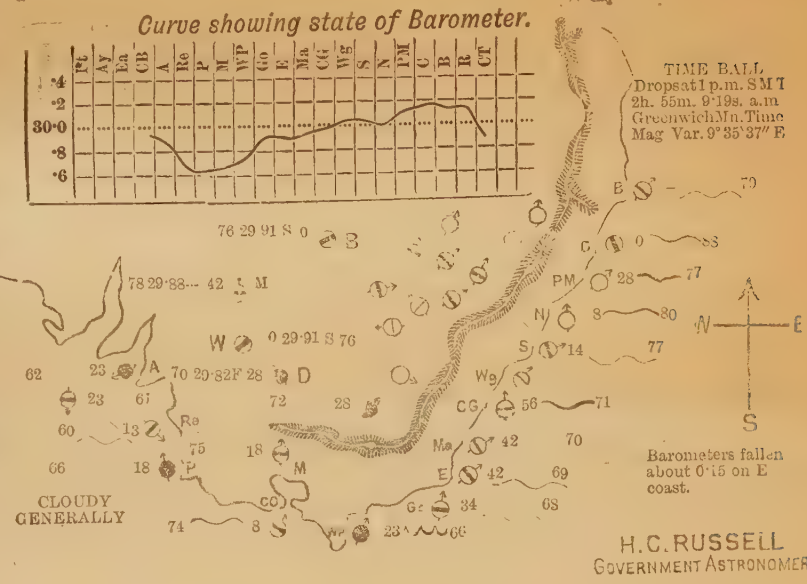
Stations	wt	Ma	mn	r'in
Albury	d	94	72	0·13
Armidale	b	79	57	0
Balranald	c	76	58	0·09
Bathurst	g	85	65	0
Bend'm'r	b	82	58	0
Bodalla ..	g	84	47	0
Bourke ..	g	85	71	0·33
C'md'n H.	b	81	69	0
C. St. Geo.	c	82	67	0
Carcoar ..	u	80	68	0·02
Casino ..	b	87	59	0
Cassilis .	g	86	76	0
Clarence	c	81	67	0
C'nd'b'rm	u	74	[illegible]	[illegible]
Cooma ..	c	91	61	0
Coonab'n	u	93	69	0
C'nam'ble	c	--	--	0
Cowra ..	[illegible]	89	75	0
Deniliq'n	r	84	65	0·50
Dubbo ..	g	92	74	0
Eden	u	72	64	0·07
Euston ..	g	79	65	0·65
Forbes ..	g	87	74	0
Gl'n Inn's	b	81	54	0
Goulburn	g	84	63	0
Grafton ..	b	90	66	0·34
Gulgong	c	83	65	0
Gunned'h	c	97	75	0
Hay	r	86	71	0·36
Hill End	u	--	--	0
Inverell ..	b	84	60	0
Kiandra	g	73	55	0·18
Lismore	c	90	65	0
Maitland	b	91	72	0
Marsdens	p	83	76	0·06
Menindie	c	81	66	0·09
Molong ..	–	--	--	—
Moree ..	c	92	70	0
Moruya ..	c	79	66	0
Moss Vale	c	86	58	0
Mt. Hope	p	79	70	0·11
M. Vict'ria	c	82	59	0
Mudgee ..	u	87	64	0
M'rr'mb'h	c	86	72	0·01
M'rr'r'ndi	c	86	70	0
Mus'lb'r'k	b	98	72	0
Narrabri	b	103	51	0
Newcastle	c	81	69	0
Nowra ..	c	80	64	0
Orange ..	g	84	64	0
Picton ..	g	85	66	0
P. M'q'rie	b	85	66	0
P.St'ph'ns	c	86	66	0
Q'nbeyan	c	83	68	0·06
Quirindi	c	88	66	0
Singleton	b	90	74	0
SYDNEY ..	c	78	69	0
Tamw'rth	c	91	67	0
Taralga ..	c	86	62	0
Taree	c	89	69	0
T'nt'rfield	c	82	56	0
Wagga ..	p	93	70	0·14
Walcha ..	c	81	55	0
Walgett ..	u	100	76	0
W'ntw'rth	c	78	62	0·67
Wilcannia	c	--	--	0·86
W'll'ng'ng	g	81	68	0
Young ..	u	87	69	0

SYDNEY OBSERVATORY

LATITUDE 33° 51′ 41″ S.: LONGITUDE 10 h. 4m. 50·8s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 23. 38·685
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Clo, wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.



Barometers fallen about 0·15 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b, standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column. M'n gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth, Ay, Albany, Ea, Eucla, CB Cape Borda, A, Adelaide, Re, Robe; P, Portland; M Melbourne, WP Wilson's Promontory, Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay, Wg, Wollongong, S, Sydney, N, Newcastle, P M Port Macquarie; C, Clarence River, B, Brisbane; R, Rockhampton; C, Cooktown. Inland the state of barometer is given in gates at Albury Deniliquin Wentworth Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia reports weather generally dull, raining inland to Port Augusta; prevailing winds S.W. to S. and fresh; moderate sea and steady barometers; heavy rains recorded, heaviest 1·74. Rainfall: Port Darwin, 0·51; Daly Waters, 0·09; Alice Springs, 0·90; Tennant's Creek, 0·36; Port Augusta, 0·07; Streaky Bay, 0·30; Cape Borda, 0·43; Adelaide, 0·34; Robe, 1·16; M'Donnell Bay, 0·52.

Victoria.—Generally cloudy, with light N. wind and falling barometer; moderate sea on coast. Rainfall: Melbourne, 0·41; Cape Otway, 0·34; Wilson's Promontory, 0·17; Lake Entrance, 0·34; Portland, 1·04.

Tasmania.—Light rain falling on N. coast; wind light from S.E. Rain: Low Heads, 0·28.

New Zealand.—Russell, Wellington, and Bluff, generally fine and clear, with light S. wind, and barometers generally standing at 30.10; wind fresh on S. and W. coast.

New South Wales.—Generally cloudy. Light rain still falling in places inland. Heaviest: Balranald, 0·90; Deniliquin, 0·50; Wilcannia, 0·86; Wentworth, 0·67; Euston, 0·65; Hay, 0·36; Temora, 0·16. Full details in list above in map. Smooth sea, light to fresh northerly winds and falling barometers on coast.

Queensland.—Generally cloudy, with S.E. and N.E. winds and moderate sea. Showery at Rockhampton (0·07). Rainfall at Cape Moreton, 0·17; Townsville, 0·03; and Cooktown, 1·10.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, N.N.E., 13, cloudy and gloomy and showery, temperature 72°; Cape Otway, W.N.W., 13, dense fog, sea moderate, temperature 65°; Portland, S.W., 28, cloudy and misty, sea smooth, temperature 64°; Wilson's Promontory, N.N.W., 23, squally, gloomy, sea rough, temperature 73°.

New South Wales.—Albury, S., drizzling rain, temperature 78°; Cape St. George, N., 42, fine, temperature 74°; Deniliquin, N.E., fine, temperature 80°; Dubbo, W., 14, like rain, temperature 82°; Goulburn, N., dull, temperature 73°; Menindie, W., dusty, temperature 80°; Moruya, N.E., 18, cloudy and gloomy, moderate sea, temperature 67°; Newcastle, N.E., fine, smooth sea, temperature 72°; Port Macquarie, N.N.E., 42, fine, moderate sea, temperature 80°; Sydney, N.E., 18, cloudy, smooth sea, temperature 75°; Wentworth, W., 42, stormy, temperature 70°; Walgett, N.E., 14, cloudy and threatening, temperature 92°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 6 inches above summer level; at Hay, below summer level; at Balranald, 8 inches above summer level. Murray: At Albury, 11 inches above summer level; at Euston, 3 feet 4 inches above summer level. Darling: At Wentworth, 4 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 24.

Sun rises at 4.49, sets at 7.11; Moon, 9.24 p.m., sets 6.57 a.m. Mercury, 4.10 a.m., 6.12 p.m.; Venus, 8.28 a.m., 10.4 p.m.; Mars, 11.29 p.m., 10.58 a.m.; Jupiter, 12.1 a.m., 12.11 p.m.; Saturn, 7.13 p.m., 5.7 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 9.58 a.m. and 10.21 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 24, 1885

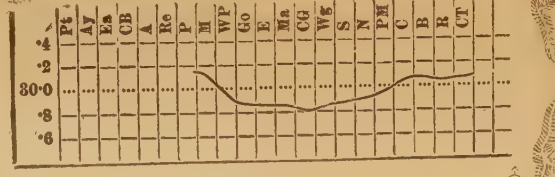
Stations	wt	Mx	Mn	Rn
Albury	c	77	66	0·50
Armidale	u	85	63	0
Balranald	g	84	51	0·04
Bathurst	d	79	65	0·40
Bend'm'r	u	82	67	0
Bodalla ..	–	—	—	—
Bourke ..	g	84	70	0·80
C'md'n H.	c	81	73	0
C. St. Geo.	c	76	67	0
Carcoar ..	u	86	70	0·41
Casino ..	b	88	41	0
Cassilis ..	r	90	75	0·05
Clarence	c	88	67	0
C'nd'b'lin	u	68	53	0·83
Cooma ..	g	80	60	0·21
Coonab'n	r	92	68	0·22
C'nam ble	r	—	—	0
Cowra ..	u	87	70	0·41
Deniliq'n	c	85	55	0·95
Dubbo ..	r	85	67	1·01
Eden	u	72	64	0·07
Euston ..	g	82	60	0·08
Forbes ..	g	79	67	0·50
Gl'n Inn's	u	93	59	0
Goulburn	g	79	46	0·09
Grafton ..	b	87	66	0
Gulgong	r	83	65	1·28
Gunned'h	b	99	73	0
Hay	c	86	68	0·15
Hill End	r	—	—	0·50
Inverell ..	–	—	—	—
Kiandra	–	—	—	—
Lismore	b	87	67	0
Maitland	p	99	77	0
Marsdens	c	77	73	0·66
Menindie	u	84	65	0
Molong ..	o	80	61	0·84
Moree ..	u	90	72	0
Moruya ..	u	79	66	0
Moss Vale	u	84	67	0·02
Mt. Hope	p	77	65	0·57
M. Vict'ria	g	80	60	0
Mudgee ..	r	85	61	0·36
M'rr'mb'h	u	78	67	0·60
M'rr'r'ndi	u	88	75	0
Mus'lb'r'k	u	102	76	0
Narrabri	u	108	74	0
Newcastle	u	84	71	0·01
Nowra ..	–	—	—	—
Orange ..	g	78	62	1·07
Picton ..	o	87	72	0
P. M'q'rie	c	81	67	0
P.St'ph'ns	c	85	66	0
Q'nbeyan	g	75	61	0·75
Quirindi	u	89	68	0
Singleton	r	93	74	0
SYDNEY ..	d	80	70	0·03
Tamw'rth	b	93	74	0
Taralga ..	b	75	64	0
Taree	b	92	69	0
T'nt'rfield	b	88	57	0
Wagga ..	b	80	64	1·26
Walcha ..	b	80	60	0
Walgett ..	b	98	70	0·90
W'ntw'rth	b	81	57	0
Wilcannia	b	—	—	0
W'll'ng'ng	b	76	68	0
Young ..	b	77	63	0·92

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·[illegible]3
Total Rainfall from January 1st to December 24.. 38·712
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine. Clo[illegible] wind N. [illegible] wind [illegible]
T. storm, R. [illegible], wind S. [illegible] wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



TIME BALL
Drops at 1 p.m. SMT
2h. 55m. 9·13s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m.: b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; Rn, the rain for the previous 24 hours. The symbols used in the map are explained on the map. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour, next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown — Pt, Perth; Ay, Albany, Ea, Eucla, CB Cape Borda, A, Adelaide, Re, Robe, P, Portland; M, Melbourne, WP, Wilson's Promontory, Go, Gabo, E, Eden, Ma, Moruya; CG, Clarrvis Bay, Wg, Wollongong, S, Sydney; N, Newcastle, PM, Port Macquarie; C, Clarence River, B, Brisbane, R, Rockhampton, CT, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards; northerly winds preceding them, and southerly following.

South Australia.—Light southerly winds north of Alice Springs. Last report from Barrow, 2·05 rain; Port Darwin, 1·40 rain.

Victoria.—Cloudy, dull, and foggy on coast, with fresh cold southerly winds, rising barometer, and rough sea. Showery inland at Echuca, with fresh N.E. winds. Rainfall: Melbourne, 0·57; Portland, 0·21; Cape Otway, 0·51; Wilson's, 0·14; Echuca, 0·61.

Tasmania.—Fine and clear on north coast, with fresh W.N.W. breeze. Rainfall: Low Heads, 1·18.

New Zealand.—Russell, barometer 30.20, wind E., 40, showery; Wellington, barometer 30·10, wind N.W., 23, fine; Bluff, barometer 29·80, wind N.W., fine.

New South Wales.—Cloudy and dull on coast, with light N.E. and N.W. winds. Moderate sea and falling barometer. Drizzling rain on mountains. Steady rain in central districts. Good rains have fallen over the central, western, and southern parts of colony; the heaviest on the western slopes of the range, particularly over the watershed of the Macquarie, 1·28 being measured at Gulgong, and 1·01 at Dubbo. Stations S.W. and S. from the sources of the Macquarie report a good rainfall, averaging over half-an-inch, and extending S. into Victoria. No rain has fallen N. of the Namoi River inland, nor of Newcastle on the coast, but in the N.W. Walgett reports 0·90, and still falling, and Bourke 0·80. The Darling is, however, still below summer level. Full details of rain and weather at each station are given above. Temora (not in map) reports rain 0·52, and still falling.

Queensland.—Fine, with clouds; wind S.E.; sea moderate. Showery at Townsville. Rainfall: Rockhampton, 0·01; Townsville, 0·10

3 P.M. OBSERVATIONS.

New South Wales.—Deniliquin, S., cloudy, temperature 78°; Dubbo, S.W., cloudy, temperature 77°; Eden, S.W., 40, fine heavy sea, temperature 67°; Newcastle, S., 10, raining, moderate sea, temperature 68°; Port Macquarie, N., 20, cloudy, moderate sea, temperature 72°; Sydney, S., 30, like rain, smooth sea, temperature 66°; Wentworth, W., cloudy, temperature 65°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 3 inches above summer level; at Hay, summer level; at Balranald, 3 inches below summer level. Murray: At Albury, 11 inches above summer level; at Euston 3 feet 4 inches above summer level. Darling. At Wentworth, 4 feet 5 inches above summer level; Menindie and Bourke, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 25.

Sun rises at 4.49, sets at 7.11; Moon, 10.9 p.m., sets 8.4 a.m.; Mercury, 4.30 a.m., 6.4 p.m.; Venus, 8.28 a.m., 10.3 p.m.; Mars, 11.26 p.m., 10.55 a.m.; Jupiter, 11.48 a.m., 12.7 p.m. Saturn, 7.8 p.m., 5.2 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison: 10.43 a.m. and 11.[illegible] p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 29, 1889.

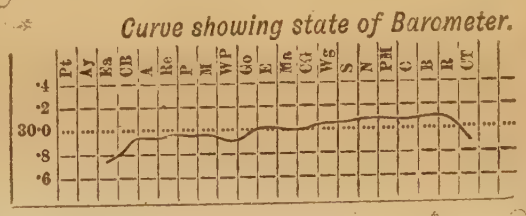
Stations	wt	Mx	m	R'in
Albury	b	91	61	0
Armidale	b	85	55	0
Balranald	b	102	48	0
Bathurst	b	88	56	0
Bend'm'r	b	87	54	0
Bodalla ..	c	79	45	0
Bourke ..	b	96	67	0
C'md'n H.	b	78	64	0
C. St. Geo.	b	75	61	0
Carcoar ..	b	80	61	0
Casino ..	b	77	58	0
Cassilis ..	b	86	66	0
Clarence	b	88	61	0
C'nd'b'lin	b	73	57	0
Cooma ..	c	83	47	0
Coonab'n	b	92	54	0
C'nam'ble	–	—	—	—
Cowra ..	b	92	63	0
Deniliq'n	b	92	50	0
Dubbo ..	b	96	57	0
Eden	–	—	—	—
Euston ..	b	100	59	0
Forbes ..	b	94	67	0
Gl'n Inn's	b	90	53	0
Goulburn	b	89	47	0
Grafton ..	–	—	—	—
Gulgong	–	—	—	—
Gunned'h	b	96	67	0
Hay	–	—	—	—
Hill End	–	—	—	—
Inverell ..	b	—	63	0
Kiandra	b	74	21	0
Lismore	b	86	61	0
Maitland	b	93	66	0
Marsdens	b	93	69	0
Menindie	–	—	—	—
Molong ..	b	99	56	0
Moree ..	b	93	63	0
Moruya ..	c	76	60	0
Moss Vale	–	—	—	—
Mt. Hope	b	76	65	0
M. Vict'ria	b	85	51	0
Mudgee ..	–	—	—	—
M'rr'mb'h	c	90	61	0
M'rr'r'ndi	b	83	62	0
Mus'lbr'k	b	—	—	—
Narrabri	b	93	59	0
Newcastle	b	80	67	0
Nowra ..	c	82	65	0
Orange ..	b	80	52	0
Picton ..	c	84	62	0
P. M'q'rie	b	79	60	0
P.St'ph'ns	b	86	61	0
Q'nbeyan	b	80	54	0
Quirindi	b	89	63	0
Singleton	b	90	67	0
SYDNEY ..	b	80	66	0
Tamw'rth	b	89	64	0
Taralga ..	b	90	57	0
Taree	b	88	61	0
T'nt'rfield	b	82	54	0
Wagga ..	–	—	—	—
Walcha ..	b	81	50	0
Walgett ..	b	—	—	0
W'ntw'rth	b	96	65	—
Wilcannia	b	—	—	0
W'll'ng'ng	b	82	65	0
Young ..	b	95	55	0

SYDNEY OBSERVATORY.
LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·81s. E.

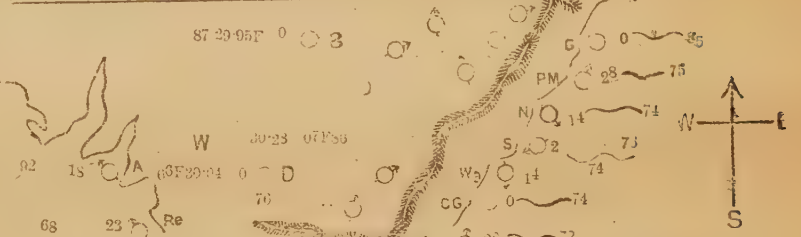
Average Annual Rainfall for 26 years..... 50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 29.. 39·905
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N. Cloudy, wind E. T. storm, wind S. Rain, wind W. If it is CALM, the symbol is used without the arrow. Smooth sea. Heavy sea. Very heavy sea.

Curve showing state of Barometer.



TIME BALL. Drops at 1 p.m. S.M.T. 2h. 55m. 9·19s. a.m. Greenwich Mn. Time. Mag. Var. 9° 35′ 37″ E.



Barometers risen about 0·01 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER.

NOTES EXPLANATORY OF MAP.

[illegible] W.T. gives the state of the weather at 9 a.m.: b [illegible] clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; [illegible]; p, passing showers; r, rain; s, snow; t, thunder; u, [illegible]. M's gives the maximum temperature for previous 24 [illegible] barometer corrected for temperature, in the rain for the previous 24 [illegible] in the map are explained on the margin. At each station [illegible] wind is blowing, the arrow pointing to the direction from which the wind is coming. A circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea, and lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ba, Bunbury; CB, Cape Bernier; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; CT, Cooktown. Below the state of barometer is given the state of Albury, Bendigo, Wentworth, Moomba, Bourke and Alice Springs. The barometer curve [illegible] at a glance to trace the depressions, beginning with Western Australia and passing eastwards, northerly winds preceding them and southerly following.

Western Australia.—Reports weather fine and sea smooth on west coast, with light southerly winds.

South Australia.—Weather fine, with moderately fresh northerly winds, falling barometer, and smooth sea; cloudy north of Powell's Creek.

Victoria.—Fine and hazy generally, light variable winds, falling barometer, and smooth sea; no rain.

Tasmania.—North coast, at Low Heads, weather fine, light westerly wind, and falling barometer; smooth sea.

New Zealand.—Russell, barometer 30·0, calm and fine; Wellington, barometer 29·7, wind N.W., fine; Bluff, barometer 29·6, wind W., fine.

New South Wales.—Weather fine and clear generally, in places hot. Where there is wind it is light and variable; but generally it is calm. No rain has fallen. (See particulars see map.)

Queensland reports heavy rains at Cooktown, light rain at Townsville, and cloudy at Brisbane; winds light and variable; smooth sea off Townsville. Rain measured at Cooktown 0·50; at Townsville, 0·40.

3 P.M. OBSERVATIONS.

Victoria.—Melbourne, S., 12, fine, temperature 81°; Cape Otway, N.W., 6, gloomy, smooth sea, temperature 73°; Portland, N., 6, sultry, smooth sea, temperature 73°; Wilson's Promontory, W., 12, overcast, smooth sea, temperature 74°; Lake Entrance N.E., 6, overcast, smooth sea, temperature 61°.

New South Wales.—Albury, calm, fine, temperature 86°; Cape St. George, N.E., 28, fine, temperature 75°; Clarence River, N.E., 28, fine, smooth sea, temperature 77°; Deniliquin, W., fine, temperature 90°; Dubbo, W., fine, temperature 84°; Eden, N.E., 14, fine, temperature 74°; Walgett, N.N.E., 14, fine, temperature 86°; Goulburn, N.W., fine, temperature 74°; Moruya, S.E., 28, fine, smooth sea, temperature 75°; Newcastle, E., 14, fine, smooth sea, temperature 70°; Port Macquarie, N.N.E., 28, fine, smooth sea, temperature 78°; Sydney, E., 16, fine, smooth sea, temperature 74°.

STATE OF RIVERS.

Murrumbidgee: At Balranald, summer level. Murray: At Albury, 2 feet 5 inches above summer level; at Euston, 3 feet 3 inches above summer level. Darling: at Wentworth: 3 feet 5 inches above summer level; at Pooncarie, Menindie, Wilcannia, and Bourke, low.

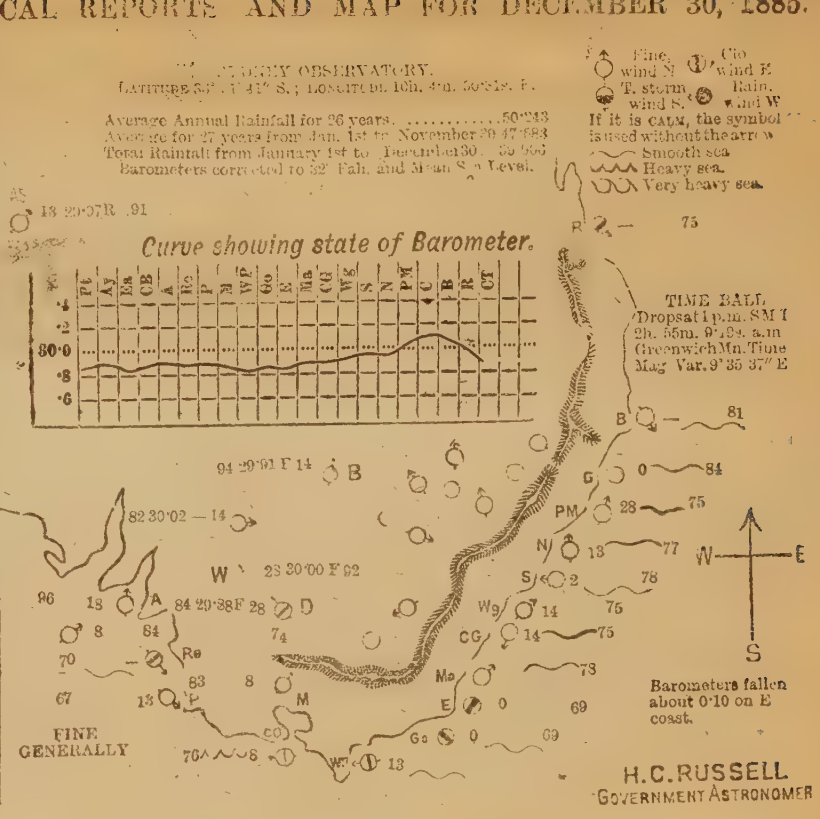
ASTRONOMICAL MEMORANDA FOR DECEMBER 30.

Sun rises at 4.53, sets at 7.13; Moon, 12.45 a.m., 1.21 p.m.; Mercury, 3·38 a.m., 5.36 p.m.; Venus, 8.30 a.m., 9.54 p.m.; Mars, 11.10 p.m., 10.42 a.m.; Jupiter, 11.39 p.m., 11.49 a.m.; Saturn, 6.47 p.m., 4.41 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 30: 2.23 a.m. and 2.59 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 30, 1885.

Stations	W.T.	M'x	m'n	R'in
Albury	b	99·52	0	
Armidale	b	87·79	0	
Balranald	c	111·54	0	
Bathurst	b	92·59	0	
Bend'n'r	b	89·56	0	
Bodalla	c	81·51	0	
Bourke	b	109·77	0	
C'md'n H.	b	80·67	0	
C. St. Geo.	b	86·64	0	
Carcoar	b	83·61	0	
Casino	b	88·55	0	
Cassilis	b	90·71	0	
Clarence	c	68·45	0	
C'nd'b'lin	b	81·56	0	
Cooma	c	95·52	0	
Coonab'n	c	98·61	0	
C'nam ble	b	—	—	—
Cowra	b	98·63	0	
Deniliq'n	g	103·88	0	
Dubbo	b	100·60	0	
Eden	c	71·61	0	
Euston	b	103·58	0	
Forbes	b	96·62	0	
Gl'n Inn's	b	95·57	0	
Goulburn	b	95·57	0	
Grafton	b	90·64	0	
Gulgong	b	85·67	0	
Gunned'h	—	—	—	—
Hay	b	104·71	0	
Hill End	b	—	—	0
Inverell	b	—	63	0
Kiandra	b	78·40	0	
Lismore	c	89·63	0	
Maitland	b	99·66	0	
Marsdens	b	97·71	0	
Menindie	b	95·74	0	
Molong	b	96·56	0	
Moree	b	94·68	0	
Moruya	c	80·63	0	
Moss Vale	—	—	—	—
Mt. Hope	b	94·68	0	
M. Vict'ria	b	96·63	0	
Mudgee	b	93·54	0	
M'rr'mb'h	—	—	—	—
M'rr'r'ndi	b	84·69	0	
Mus'lbr'k	b	—	—	0
Narrabri	c	105·72	0	
Newcastle	b	80·61	0	
Nowra	b	83·66	0	
Orange	b	85·53	0	
Picton	b	82·61	0	
P. M'q'rie	b	78·63	0	
P.St'ph'ns	b	87·64	0	
Q'nbeyan	b	88·61	0	
Quirindi	c	93·65	0	
Singleton	b	93·66	0	
SYDNEY	b	80·65	0	
Tamw'rth	b	94·63	0	
Taralga	b	99·64	0	
Taree	b	91·65	0	
T'nt'rfield	b	84·53	0	
Wagga	b	92·59	0	
Walcha	b	84·54	0	
Walgett	b	104·71	0	
W'ntw'rth	b	103·65	0	
Wileannia	b	—	—	0
W'll'ng'ng	b	84·65	0	
Young	b	99·56	0	



NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; R'in, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather, and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Beddy; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; W.P, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; C G Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; P M Port Macquarie; C, Clarence River; B Brisbane; R, Rockhampton; Ct, Cooktown. Inland the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia and passing along eastwards, northerly winds preceding them, and southerly following.

Western Australia.—Fine and clear generally, with light variable winds and smooth sea. No rain.

South Australia reports weather generally hot—fine inland; scattered clouds on and near coast; dull north of Tennant's Creek. Prevailing winds N.E. to N. and fresh smooth sea and steady barometers reported from coast stations. Dull in Northern Territory; heavy rains in night. Rainfall—Port Darwin, 1·10; Daly Waters, 1·31; Alice Springs, 0.20.

Victoria.—Generally fine, but cloudy; smooth sea, steady barometers, and light variable wind on coast. Light S.W. wind at Echuca; northerly at Omeo; sultry on coast; rough sea at Otway. No rain.

Tasmania.—Fine, but cloudy on north coast, with light W.N.W. wind.

New Zealand.—Russell, barometer 30·25, wind, calm; Wellington, barometer 30·10, wind, N.; Bluff, barometer 29 90, wind, N.W. Fine generally.

New South Wales.—Fine and clear, with falling barometers throughout; calm and sultry inland; smooth sea, and light N. winds on coast. No rain.

Queensland.—Generally fine; wind S.E.; light rain falling at Townsville, with rough sea. Rainfall: Cooktown, 0·35; Townsville, 0.23.

3 P.M. OBSERVATIONS

Victoria.—Melbourne, S., 18, dull, temperature 73°; Cape Otway, S.S.E., gloomy, smooth sea, temperature 66°; Portland, S.E., 18, dull, smooth sea, temperature 65°; Wilson's Promontory' W., 23, cloudy, smooth sea, temperature 71°; Lake Entrance' calm, sultry, smooth sea, temperature 80°.

New South Wales.—Albury, N.E., dull, hot, temperature 88°; Cape St. George, S.S.W., 28, fine, temperature 78°; Deniliquin, S., 42, fine, hot, temperature 94°; Dubbo, W.S.W., fine, temperature 87°; Eden, E., 14, fine, smooth sea, temperature 73°; Goulburn, W., 14, fine, temperature 80°; Moruya, N.E., 28, fine, moderate sea, temperature 76°; Newcastle, N.E., fine, moderate sea, temperature 75°; Port Macquarie, N.W.E., 42, fine, smooth sea, temperature 79°; Sydney, E., 8, fine, smooth sea, temperature 70°; Walgett, calm, fine, hot, temperature 101°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 11 inches above summer level; at Balranald, summer level. Murray: At Albury, 2 feet above summer level; at Euston, 3 feet 2 inches above summer level. Darling: At Wentworth, 3 feet above summer level; at Pooncarie, Menindie, low.

ASTRONOMICAL MEMORANDA FOR DECEMBER 31.

Sun rises at 4.53, sets at 7.13; Moon, 1.23 a.m., 2.19 p.m.; Mercury, 3.35 a.m., 5.33 p.m.; Venus, 8.30 a.m., 9.52 p.m.; Mars, 11.7 p.m., 10.39 a.m.; Jupiter, 11.35 p.m., 11.45 a.m.; Saturn, 6.43 p.m., 4.37 a.m. New moon, 6th; full moon, 22nd.

High water at Fort Denison, December 31: 3.35 a.m. and 4.10 p.m.

METEOROLOGICAL REPORTS AND MAP FOR DECEMBER 31, 1885.

Stations	wt	Mx	Mn	R'in
Albury	c	103	62	0
Armidale	c	90	60	0·01
Balranald	b	118	63	0
Bathurst	b	95	57	0
Bend'm'r	g	93	57	0
Bodalla..	p	94	—	0
Bourke ..	b	109	72	0
C'md'n H.	b	81	68	0
C. St. Geo.	b	80	63	0
Carcoar..	b	85	71	0
Casino ..	b	90	57	0
Cassilis .	b	93	70	0
Clarence	b	87	65	0
C'nd'b'lin	b	83	59	0
Cooma ..	c	94	52	0
Coonab'n	b	100	57	0
C'nam ble	b	—	—	—
Cowra ..	b	103	69	0
Deniliq'n	b	109	61	0
Dubbo ..	b	102	62	0
Eden	c	84	63	0
Euston ..	b	113	65	0
Forbes ..	b	105	66	0
Gl'n Inn's	b	87	53	0
Goulburn	b	96	56	0
Grafton..	b	92	64	0
Gulgong	b	87	70	0
Gunned'h	b	104	73	0
Hay	c	110	71	0
Hill End	b	—	—	0
Inverell..	b	—	66	0
Kiandra	b	80	45	0
Lismore	b	90	64	0
Maitland	b	103	68	0
Marsdens	c	101	73	0
Menindie	b	100	76	0
Molong ..	b	101	60	0
Moree ..	b	97	74	0
Moruya..	f	84	63	0
Moss Vale	c	88	59	0
Mt. Hope	b	98	77	0
M. Vict'ria	b	95	60	0
Mudgee..	b	96	59	0
M'rr'mb'h	b	93	69	0
M'rr'r'ndi	b	87	65	0
Mus'lbr'k	b	108	65	0
Narrabri	b	108	74	0
Newcastle	c	82	68	0
Nowra ..	-	—	—	0
Orange ..	c	88	58	0
Picton ..	c	94	58	0
P. M'q'rie	b	79	66	1·06
P.St'ph'ns	b	85	64	0
Q'nbeyan	b	94	65	0
Quirindi	b	95	66	0
Singleton	b	102	71	0
SYDNEY ..	b	85	66	0
Tamw'rth	b	95	64	0
Taralga ..	b	96	55	0
Taree	b	92	66	0
T'nt'rfield	b	90	57	0
Wagga ..	b	92	67	0
Walcha ..	c	65	55	0·04
Walgett..	b	107	69	0
W'ntw'rth	b	110	82	0
Wilcannia	b			
Young ..	b	103	58	0

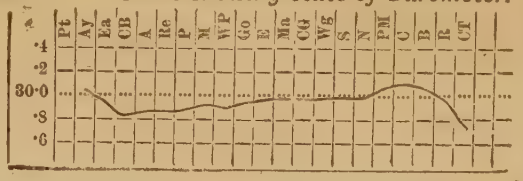
SYDNEY OBSERVATORY.

LATITUDE 33° 51′ 41″ S.; LONGITUDE 10h. 4m. 50·31s. E.

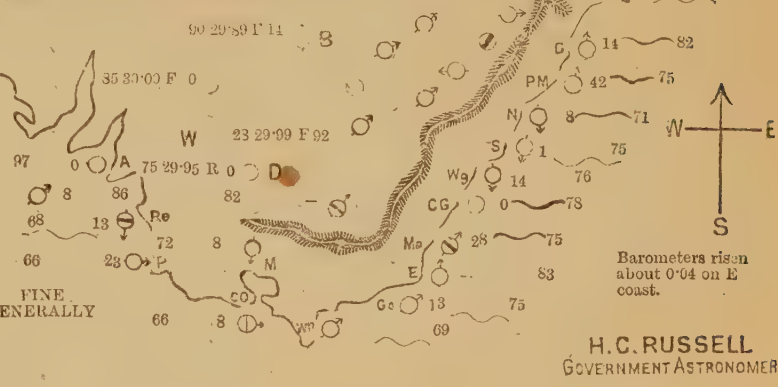
Average Annual Rainfall for 26 years.....50·243
Average for 27 years from Jan. 1st to November 30 47·583
Total Rainfall from January 1st to December 31.. 39·905
Barometers corrected to 32° Fah. and Mean Sea Level.

Fine, wind N — Clo wind E
T. storm, wind S. — Rain, wind W
If it is CALM, the symbol is used without the arrow
Smooth sea
Heavy sea.
Very heavy sea.

Curve showing state of Barometer.



TIME BALL
Dropsat 1 p.m. S.M.T.
2h. 55m. 9·19s. a.m.
Greenwich Mn. Time
Mag. Var. 9° 35′ 37″ E.



Barometers risen about 0·04 on E coast.

H. C. RUSSELL
GOVERNMENT ASTRONOMER

NOTES EXPLANATORY OF MAP.

In the list of stations the column headed W.T. gives the state of the weather at 9 a.m., b standing for blue sky; c, detached clouds; d, drizzling rain; f, fog; g, gloomy; h, hazy; m, misty; n, frosty; o, overcast; p, passing showers; r, rain; s, snow; t, thunder; u, threatening. The next column, M'x gives the maximum temperature for previous 24 hours. M'n the corresponding minimum temperature; r'n, the rain for the previous 24 hours. The symbols used in the map are explained on the margin. At each coast station the wind symbol is placed like a vane pointing to the direction from which the wind is coming. A clear circle with it means fine weather; a circle with bar, cloudy weather; and a black spot, raining. Next to this symbol are placed figures denoting the number of miles the wind is moving per hour; next, a symbol showing the state of the sea; and, lastly, figures denoting the shade temperature at 9 a.m. The barometer curve shows the state of barometers round the coast from Perth to Cooktown:—Pt, Perth; Ay, Albany; Ea, Eucla; CB, Cape Borda; A, Adelaide; Re, Robe; P, Portland; M, Melbourne; WP, Wilson's Promontory; Go, Gabo; E, Eden; Ma, Moruya; CG, Jervis Bay; Wg, Wollongong; S, Sydney; N, Newcastle; PM, Port Macquarie; C, Clarence River; B, Brisbane; R, Rockhampton; Ct, Cooktown. Inside the state of barometer is given in figures at Albury, Deniliquin, Wentworth, Menindie, Bourke, and Alice Springs. The barometer curve enables one at a glance to trace the depressions, beginning with Western Australia, and passing along eastwards; northerly winds preceding them, and southerly following.

Western Australia.—Cloudy round southern coast, with light E. and S.E. winds and smooth sea. No rain.

South Australia reports weather fine, very hot, light northerly winds, dull and sultry north of Barrow Creek. Smooth sea, steady barometer and light N.E. to S.E. winds and calms on coast. Cloudy in Northern Territory. Strong N.W. wind at Port Darwin. Rain—Port Darwin, 0·05; Daly Waters, 0·37.

Victoria.—Generally fine and clear, with light E. and S. winds and steady barometer. Smooth sea and sultry weather on coast. No rain.

Tasmania.—Fine, but cloudy on north coast, with fresh N.E. wind.

New Zealand.—Russell, barometer 30·20, wind calm, fine; Wellington, barometer 29·90, wind N.W., fine; Bluff, barometer 29·70, wind W., showery.

New South Wales.—Generally fine and clear throughout, with light variable winds and calms. Smooth sea, rising barometers, and light S.E. to N.E. winds and calms on coast. Full details in map above.

Queensland.—Fine in southern parts, cloudy N. of Rockhampton; winds S.E., sea moderate. Rainfall: Townsville, 0·19 (and showery, with rough sea); Cooktown, 0·95.

3 P.M. OBSERVATIONS.

New South Wales.—Albury, calm, cloudy, temperature 94°; Cape St. George, N.N.E., 28, fine, smooth sea, temperature 76°; Clarence River, E.N.E., 14, fine, smooth sea, temperature 78°; Deniliquin, W., hot, temperature 98°; Dubbo, S.E., 14, fine, temperature 90°; Eden, N.E., 14, fine, smooth sea, temperature 76°; Goulburn, calm, fine, temperature 78°; Menindie, N., fine, hot, temperature 93°; Moruya, N.E., 28, cloudy, thunderstorm, smooth sea, temperature 74°; Newcastle, N.E., 8, fine, smooth sea, temperature 73°; Port Macquarie, N.N.E., 28, fine, smooth sea, temperature 79°; Sydney, E., 8, fine, smooth sea, temperature 76°; Wentworth, N., fine, hot, temperature 100°; Walgett, S.E., fine, hot, temperature 95°.

Victoria.—Melbourne, S.S.W., 13, fine, temperature 77°; Cape Otway, E., 8, fine, hazy, smooth sea, temperature 79°; Portland, E.S.E., 23, fine, smooth sea, temperature 71°; Wilson's Promontory, N.E., 23, squally, hazy, smooth sea, temperature 76°.

STATE OF RIVERS.

Murrumbidgee: At Wagga, 2 feet 8 inches above summer level; at Hay, summer level; at Balranald, 8 inches below summer level. Murray: At Albury, 2 feet above summer level; at Euston, 3 feet 1 inch above summer level. Darling: At Wentworth, 2 feet 11 inches above summer level; at Pooncarrie, Menindie, Wilcannia, and Bourke, low.

ASTRONOMICAL MEMORANDA FOR JANUARY 1.

Sun rises at 4.54, sets at 7.13; Moon, 2.2 a.m., 3.16 p.m.; Mercury, 3.31 a.m., 5.31 p.m.; Venus, 8.29 a.m., 9.51 p.m.; Mars, 11.4 p.m., 10.36 a.m.; Jupiter, 11.32 p.m., 11.42 a.m. Saturn, 6.38 p.m., 4.32 a.m. New moon, 5th; full moon, 20th.

High water at Fort Denison, January 1: 4.45 a.m. and 5.20 p.m.

NOAA CENTRAL LIBRAY
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